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EPA'S PROPOSED REVISIONS TO THE PARTICULATE MATTER AIR QUALITY STANDARDS

HEARING

BEFORE THE

SUBCOMMITTEE ON CLEAN AIR, CLIMATE CHANGE, AND NUCLEAR SAFETY

OF THE

COMMITTEE ON ENVIRONMENT AND PUBLIC WORKS UNITED STATES SENATE

ONE HUNDRED NINTH CONGRESS

SECOND SESSION

JULY 13, 2006

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COMMITTEE ON ENVIRONMENT AND PUBLIC WORKS

ONE HUNDRED NINTH CONGRESS

SECOND SESSION

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C O N T E N T S

	Page				
JULY 13, 2006					
OPENING STATEMENTS					
Bond, Hon. Christopher S., U.S. Senator from the State of Missouri Carper, Hon. Thomas R., U.S. Senator from the State of Delaware DeMint, Hon. Jim, U.S. Senator from the State of South Carolina Inhofe, Hon. James M., U.S. Senator from the State of Oklahoma Isakson, Hon. Johnny, U.S. Senator from the State of Georgia Lautenberg, Hon. Frank, U.S. Senator from the State of New Jersey Lieberman, Hon. Joseph I., U.S. Senator from the State of Connecticut, prepared statement Voinovich, Hon. George V., U.S. Senator from the State of Ohio	10 7 14 5 15 13 53 1				
WITNESSES					
Alford, Harry C., president and CEO, National Black Chamber of Commerce Prepared statement Response to an additional question from Senator Voinovich Christopher, William F., executive vice president and group president, Aerospace, Automotive and Commercial Transportation, Aloca Prepared statement Response to an additional question from Senator Voinovich Gould, Larry J., chair, Lenawee County Board of Commissioners, Lenawee County, MI Prepared statement Responses to additional questions from Senator Voinovich Heiskell, BeBe, commissioner, Walker County, GA Prepared statement Responses to additional questions from Senator Voinovich Paul, John A., supervisor, Regional Air Pollution Control Agency, Dayton, OH Prepared statement Schneider, Conrad, advocacy director, Clean Air Task Force Prepared statement Responses to additional questions from Senator Inhofe Wehrum, William, Acting Assistant Administrator, Office of Air and Radiation, U.S. Environmental Protection Agency Prepared statement Prepared statement Schneider, Conrad, advocator director Agency Prepared statement Schneider Senator Inhofe Schneider Senator Senator Inhofe Schneider Senator Senator Inhofe Schneider Senator Senator Inhofe Schneider Senator Senator Senator Inhofe Schneider Senator Senato	38 68 70 43 70 74 31 61 63 32 65 66 29 58 40 75 119				
ADDITIONAL MATERIAL					
Article, To the Point, Talking Points for Manufacturers, July 2006	130 129 -243 -145				
Report, Clean Air Task Force, December 13, 2004					

EPA'S PROPOSED REVISIONS TO THE PARTIC-ULATE MATTER AIR QUALITY STANDARDS

THURSDAY, JULY 13, 2006

U.S. Senate,
Committee on Environment and Public Works,
Subcommittee on Clean Air, Climate Change,
And Nuclear Safety,
Washington, DC.

The subcommittee met, pursuant to notice, at 9:30 a.m. in room 628, Dirksen Senate Office Building, Hon. George Voinovich (chairman of the subcommittee) presiding.

Present: Senators Voinovich, Inhofe, Bond, DeMint, Isakson, Carper, and Lautenberg.

OPENING STATEMENT OF HON. GEORGE V. VOINOVICH, U.S. SENATOR FROM THE STATE OF OHIO

Senator VOINOVICH. The committee will come to order. Good

morning, and thank all of you for coming.

Today's hearing is the first in Congress on the Environmental Protection Agency's Proposed Revisions to the Particulate Matter Air Quality Standards. We are focusing on what EPA proposed, what it means for the Nation. Next Wednesday, I have asked Chairman Inhofe to hold a second hearing at the full committee level instead of this subcommittee on the science and risk assessment behind the Agency's proposed revisions.

This is a very important issue with broad ranging impacts. It is at the core of what I focused in this committee, the Senate and throughout my career. It gets back to harmonizing our energy, environment and economic needs. I think that our refusal to look at cost benefit analysis, peer review, alternative ways of getting things done, has cost this country dearly. We just can't keep going the way we are. It is not sustainable.

Before discussing EPA's proposal, it is very important that we put this hearing into context. First, our air is getting significantly cleaner. This chart is there, it is very clear. That is that in spite of the fact that we have had a 187 percent increase in gross domestic product, 171 percent increase in the miles traveled, energy consumption has been up 47 percent, population up 47 percent, we have had a 54 percent reduction in emissions from the six principal pollutants. Many Americans are not aware of that.

Second, our Nation's high energy prices are having a devastating impact across the United States. We have the highest natural gas prices in the world, impacting families who depend on it to heat their homes and businesses, and use it to make their products. I

have to tell everybody and this room and this committee, every time I go home, people are screaming about their gas costs. They know they are down now, but this winter—we were lucky, we had a light winter. These are a lot of poor people who can't afford it. Even the local restaurants are complaining, people aren't coming in. Between the high natural gas costs and gasoline prices, it is having a devastating impact on just the ordinary citizen in this country.

We have lost more than 3.1 million jobs. In my State, we have lost 200,000 manufacturing jobs, partially due to high natural gas costs. Third, EPA has designated 495 counties across the Nation, 38 of them in my State, as in nonattainment of the existing particulate matter and ozone air quality standards. States are working now to develop implementation plans to comply with these standards. As a former Governor who brought Ohio's counties into attainment, I know firsthand that this is an extremely complicated and resource-intensive task. This subcommittee has examined the great challenge associated with implementing these standards with hearings that I held in April 2004 and November 2005.

But here we go again. EPA has proposed to move the goalposts on State and local communities in the middle of this process by changing the particulate matter standards. I am going to focus not on coarse, but fine particulate matter, where EPA proposed to reduce the daily standard from 65 micrograms per cubic meter to 35

and retain the annual standards at 15.

Under EPA's current standards, there are 208 nonattainment counties. There they are right there. If EPA lowers their annual standard to 14, let's show chart 3, it shows 631 counties that could be in nonattainment under such revision. I would like to admit that the information we got from that was prepared by the American Petroleum Institute. So I want everybody to understand that. But Mr. Wehrum, I would love to see your chart. Your chart differs from this. But I can guarantee you that there are a whole lot more counties with 14 than there are currently today in nonattainment.

EPA claims the Federal clean air rules, such as the Clean Air Interstate Rule and the new diesel fuel engine regulations will bring most of the counties into attainment without local effort. This is exactly what EPA told us with the current standards. But we have seen that it ignores reality. I was told, even by the guy that

runs CEQ, Jim Connaughton, don't worry.

Now, my EPA director, Joe Koncelik, says we have to worry. By 2010, we are in deep trouble in our State, because we are not going to be able to meet even the current standards that have been set. Additionally, nonattainment designation threatens highway funding and it is going to push us into more use of natural gas and increase our electric rates.

Further, the Federal clean air rules will play only a small role in the designation of nonattainment areas and in helping communities meet the standards. Again, I have been told that these new regulations, the CAIR rules and everything else are going to help out. But the attainment is going to come out before those rules even really take effect. Then when you determine the attainment deadline at the end of 2015, that is when the other set of these are supposed to take effect. In effect, what EPA is saying about all

these things are going to mitigate the problem, don't worry, I don't

agree with it. It doesn't make sense.

This is frustrating, but the truth is that we do not know what impact revising the standards is going to have on this country. Neither does the EPA. The Agency has released a draft regulatory impact that only looks at five cities. I will insert into the record comments from several industries that because of the uncertainty project the cost of EPA's proposal to be as low as \$20 billion and as much as \$60 billion, \$20 billion and as much as \$60 billion. It would be the most expensive Federal regulation in the history of the Office of Management and Budget.

EPA says that we should ignore this analysis, because they will release a completely different one when the final decision is made. I am astounded that EPA is working on this major rule behind closed doors and we will not know what impact it will have until

the final decision is released.

I will conclude with three points. I understand the law requires EPA to review the air quality standards every 5 years, and that a court settlement requires a final decision by September of this year. However, the law and the consent decree do not require EPA to change the standard. In fact, I would like to insert into the record a report from the Congressional Research Service on several questions that Chairman Inhofe and I have asked. According to CRS, EPA has conducted multiple reviews of the National Ambient Air Quality Standards since their establishment in 1971. The primary health-based standards have been strengthened twice, retained six times and relaxed or revoked on three occasions.

[The referenced document referred to may be found on page 131.] Next I want people to understand that the Clean Air Act gives the EPA Administrator the discretion to set the standard. Let me quote from the CRS report again: "The Administrator is given clear discretion: the requirements are conditioned by the phrase in the judgment of the Administrator." Last, this rule will have a major impact on this Nation and the people that are concerned.

After all the members give their opening statements, I am going to insert letters and statements from Governors, mayors and other elected officials and various groups expressing concern about revising the particulate matter standards at this time. I look forward to be a principle of the particular from the principle of the particular from the principle of the principle of the particular from the pa

to hearing from the witnesses on this.

[The prepared statement of Senator Voinovich follows:]

Statement of Hon. George V. Voinovich, U.S. Senator from the State of Ohio

The hearing will come to order. Good morning and thank you for coming. Today's hearing is the first in Congress on the Environmental Protection Agency's

proposed revisions to the particulate matter air quality standards. We are focusing on what EPA proposed and what it means for the Nation. Next Wednesday, I have asked Chairman Inhofe to hold a second hearing at the full committee level instead of in this subcommittee on the science and risk assessment behind the Agency's proposed revisions.

This is a very important issue with broad ranging impacts. It is at the core of what I have focused on in this committee, the Senate, and throughout my career we must harmonize our energy, environment, and economic needs.

Before discussing EPA's proposal, it is very important that we put this hearing into context. First, our air is getting significantly cleaner. [CHART 1] Since 1970 while our Gross Domestic Product, vehicle miles traveled, energy consumption, and

population have increased substantially emissions of the main pollutants of concern

have been reduced by 54 percent.

Second, our Nation's high energy prices are having a devastating impact across the United States. We have the highest natural gas prices in the world impacting families who depend on it to heat their homes and businesses that use it to make their products. The United States has lost more than 3.1 million and my State of Ohio has lost nearly 200,000 manufacturing jobs since 2000, due in large part to

high natural gas prices.

Third, EPA has designated 495 counties across the Nation 38 in Ohio as in nonattainment for the existing particulate matter and ozone air quality standards. States are working now to develop implementation plans to comply with these standards. As a former Governor who brought Ohio's counties into attainment, I know firsthand that this is an extremely complicated and resource intensive task. This subcommittee has examined the great challenge associated with implementing these standards with hearings that I held in April 2004 and November 2005.

But, here we go again! EPA has proposed to move the goalposts on State and local

communities in the middle of this process by changing the particulate matter standards. I am going to focus not on coarse, but fine particulate matter where EPA proposed to reduce the daily standard from 65 micrograms per cubic meter to 35 and

to retain the annual standard at 15.

[CHART 2] Under EPA's current standard, there are a total of 208 nonattainment counties. EPA's proposed revision could increase the number of nonattainment counties to 530. Some groups are advocating for a more stringent standard, and EPA is considering lowering the annual standard to 14. [CHART 3] This map shows the 631 counties that could be in nonattainment under such a revision.

EPA claims that Federal clean air rules such as the Clean Air Interstate Rule and new diesel fuel and engine regulations will bring most of the counties into attainment without local effort. This is exactly what EPA told us with the current standards, but we have seen that this simply ignores reality.

While Federal rules will help areas, I am concerned that EPA is trivializing the impact of being designated nonattainment in the first place. Let me quote from Cinitati Chember of Commons President Michael Fisher are 2004 hosping "Simple Commons President Michael Fisher Area 2004 hosping "Simple Commons President Michael Fisher Area 2004 hosping "S

cinnati Chamber of Commerce President Michael Fisher at our 2004 hearing: "Simply stated, conducting business in an area designated as nonattainment is more complicated, more time-consuming, and more costly."

Additionally, a nonattainment designation threatens highway funding and jobs

because businesses will not expand or locate in such an area. It can also lead to higher energy costs because coal fired powerplants are a source of particulate matter. These emissions can be reduced by installing control equipment or switching to

natural gas ultimately leading to higher electricity and natural gas prices.

Furthermore, Federal clean air rules will play only a small role in the designation of nonattainment areas and in helping communities meet the standards. [CHART 4] As you can see, EPA is planning on designating areas before 2010 when the first phase of reductions will be achieved under these rules. The Agency has also announced that the attainment deadlines will be before 2015 when the second phase of reductions will take place.

This is very frustrating, but the truth is that we do not know what impact revising the standards will have on the country and neither does EPA. The Agency has released a draft Regulatory Impact Assessment (RIA) that only looks at five cities. I will insert into the record comments from several industries that because of the uncertainty project the cost of EPA's proposal to be as low as \$20 billion and as much as \$60 billion per year incremental cost which would be the most expensive Federal regulation in the history of the Office of Management and Budget.

EPA says that we should ignore this analysis because they will release a completely different one with the final decision. I am astounded that EPA is working on this major rule behind closed doors, and we will not know what the impact will

be until the final decision is released.

I will conclude with three points. I understand that the law requires EPA to review the air quality standards every 5 years and that a court settlement requires a final decision by September of this year. However, the law and this court do not

require EPA to change the standard.

In fact, I would like to insert into the record a report from the Congressional Research Service on several questions that Chairman Inhofe and I asked. According to CRS: "EPA has conducted multiple reviews of the National Ambient Air Quality Standards since their establishment in 1971. The primary (health-based) standards have been strengthened twice, retained 6 times, and relaxed or revoked on 3 occa-

Next, I want people to understand that the Clean Air Act gives the EPA Administrator the discretion to set the standard. Let me quote from the CRS report again: "the Administrator is given clear discretion: the requirements are conditioned by the

phrase in the judgment of the Administrator."

Lastly, this rule will have a major impact on this Nation and people are concerned. After all of the members give their opening statements, I am going to insert letters and statements from Governors, mayors, other elected officials, and various groups expressing concern about revising the particulate matter standards at this time

I look forward to hearing from the witnesses on this important issue that truly impacts our energy, environment, and economic needs.

Thank you.

Senator Voinovich. Senator Carper.

Senator Carper. I think Senator Inhofe had asked to go ahead, out of order, and that is fine with me.

OPENING STATEMENT OF HON. JAMES M. INHOFE. U.S. SENATOR FROM THE STATE OF OKLAHOMA

Senator Inhofe. Senator Carper, I do appreciate that very much. I want to tell you, Mr. Chairman, and the rest of this committee, that this is very, very significant, what we are doing here today. Unfortunately, because of the Hamdan decision, the U.S. Supreme Court decision on detainees and the Uniform Code of Military Justice, I have to attend that hearing. However, we will have a chance to get into more detail, as you pointed out, on Wednesday.

Let me also say that I appreciate, Mr. Chairman, the passion that you have on these issues. I know it goes without saying that you are probably one of the most qualified people on air issues that we have had. Even when you were Governor of Ohio, you came, when I held the Chair of the subcommittee that you chair now, and

testified. So I know we are leaving this in good hands.

Mr. Wehrum, I would make the point that I do not believe the science justifies ratcheting down the regulations, as I have told you in my office, given the estimated risk today is less than what was estimated in 1997 under Carol Browner when the current standard was set. I am also troubled that EPA has been selective in what studies it has chosen to give weight to this review, thus skewing the results by downplaying studies which show the current standards are sufficiently strict. I think you are selectively going after studies that give you the conclusion that you want.

We are going to examine the science issues at the hearing this coming Wednesday. Today we are focused on better understanding the process by which the EPA makes these determinations. The history of the past decisions and the impacts caused by possible tightening standards, I believe the economic impacts will be very

severe as the Chairman pointed out in his State of Ohio.

I am troubled that EPA has not provided to the public or this oversight committee a comprehensive regulatory impact analysis. While a NAAQS review is based on health considerations by statute, Congress wrote the law and is responsible not only for overseeing its execution, but for evaluating whether the way it is crafted is appropriate in light of its unintended consequences.

Moreover, any assessments of health benefits can only be made with an understanding of the economic consequences because there is a clear link between economic vitality and human health. In short, wealth is health. Poorer communities often suffer from inadequate infrastructure and that in turn will be exacerbated if these areas are designated nonattainment unnecessarily.

As we have heard in the past, when electricity prices rise, the poor and the elderly in the inner cities, such as Chicago, turn off their air conditioning and scores die each summer because they can't afford their air conditioning. As local officials know all too well, the additional burdens placed on new manufacturing facilities

discourage them from locating in these regions.

As a former mayor, I know that air regulations and the increased control burdens that accompany them for many areas can be an important factor in the decisions by companies as to where they will be locating their facilities. In fact, we were both mayors at the same time, and I can assure you that we actually lost industries at this time. So this goes far beyond just the considerations that we seem to be talking about today. Many counties, due to the implementation of current regulations such as Diesel Rule, Clean Air, Interstate Rule and others will come into compliance with current health standards.

Yet these areas will be designated nonattainment with the new standards and thus forced to impose additional controls and to remain unattractive for new business investments. By moving the goalposts, we upset the ability of these communities to pursue their compliance strategies and keep them in an endless loop that depresses their economies.

I know some of my colleagues don't think we should be holding this hearing today. But it would be irresponsible for this committee if we did not conduct thoughtful oversight of not only the science and health issues, as we will less than a week from today, but also the potential economic impacts from these regulations. We have to look at both sides, and I applaud Chairman Voinovich for holding

the hearings today.

I would hope, Mr. Chairman, that we can look at some things, I find it disturbing the EPA would assume that certain States will violate the law. If California were to comply, what would they have to do? In California, many of their counties have been out of compliance with the current standards, and many more with the new standards if they are tightened. But nothing seems to happen. It does in Oklahoma, and it does in Ohio, but not in California. I think we are not getting equal application of these rules.

So I have a lot of questions that I will be submitting for the record. Unfortunately, I do have to attend that Armed Services hearing. So I applaud the fact that you are holding this hearing, and Senator Carper, I thank you for yielding to me so that I can get over to another hearing.

[The prepared statement of Senator Inhofe follows:]

STATEMENT OF HON. JAMES M. INHOFE, U.S. SENATOR FROM THE STATE OF VERMONT

Mr. Wehrum, thank you for coming to testify to the committee to provide us with your views on the current national ambient air quality standards review of particulate matter and your proposal to tighten the current daily standard. I would make the point that I do not believe the science justifies ratcheting down the regulations at this time, given that the estimated risk today is less than what was estimated in 1997 under Carol Browner when the current standard was set.

I am also troubled that EPA has been selective in what studies it has chosen to give weight to in this review, thus skewing the results by downplaying studies which show the current standard is sufficiently strict to protect human health with an edge at margin of sefects.

an adequate margin of safety.

But we will examine the science issues in detail during the hearing next Wednesday. Today, we are focused on better understanding the process by which EPA makes these determinations, the history of past decisions, and impacts caused by possible tightened standards. I believe the economic impacts will be severe.

I am troubled that EPA has not provided to the public or this oversight committee a comprehensive regulatory impact analysis. While a NAAQS [pronounced naax] review is based on health considerations by statute, Congress wrote the law and is responsible not only for overseeing its execution, but for evaluating whether the way

it is crafted is appropriate in light of its unintended consequences.

Moreover, any assessments of health benefits can only be made with an understanding of the economic consequences because there is a clear link between economic vitality and human health. In short, wealth is health. Poorer communities often suffer from inadequate infrastructure and that in turn will be exacerbated if these areas are designated nonattainment unnecessarily. As we have heard in the past, when electricity prices rise, the poor and elderly in inner cities such as Chicago, turn off their air condition and scores die each summer because they can't afford their A/C. As local officials know all too well, additional burdens placed on new manufacturing facilities discourage them from locating in these regions.

It is my belief that we should be judicious in selecting what standards we impose on our cities and States, taking into account what would be required to fully attain these standards by the deadline set by the Clean Air Act, and then enforce these standards to ensure public health. It makes no sense to set unnecessarily and unrealistically stringent requirements, but then to excuse areas which will not comply because it is expensive while others that take their commitment seriously suffer job losses and slower growth. I am thinking in particular of California, which has consistently failed to meet previous standards and has continued to receive exemptions.

As a former mayor, I know that air regulations and the increased control burdens that accompany them for many areas can be an important factor in decisions by

companies as to where to locate their facilities.

Many counties, through the implementation of current regulations such as the diesel rule, clean air interstate rule, and others, will come into compliance with current health standards. Yet these areas will be designated nonattainment with the new standards, and thus forced to impose additional controls and to remain unattractive for new business investments. By moving the goalposts, we upset the ability of these communities to pursue their compliance strategies and keep them in an endless loop that depresses their economies

I know some of my colleagues don't think we should be holding today's hearing, but it would be irresponsible if this committee did not conduct thoughtful oversight of not only the science-health issues, as we will less than a week from today, but also the potential economic impacts from these regulations. We have to look at both

sides and I applaud Chairman Voinovich for holding today's hearing.

Senator Voinovich. Thank you, Mr. Chairman. Senator Carper.

OPENING STATEMENT OF HON. THOMAS R. CARPER, U.S. SENATOR FROM THE STATE OF DELAWARE

Senator CARPER. Thanks, Mr. Chairman.

Welcome, Mr. Wehrum. It is good to see you. Thanks for coming back to join us, and to you and the other witnesses that are here today to testify, thank you for your time and for your testimony.

No one disputes that we have made significant environmental progress since the Clean Air Act was first passed into law. But I would submit that our work is not over. Despite this progress, many areas of our country, including Delaware, have significant air quality problems. In Delaware, the entire State exceeds EPA's health standards for ozone. Northern Newcastle County, which is where I live, doesn't meet EPA standards for fine particulate mat-

I know a lot of people want to discuss the cost associated with attaining these standards, and we should. We want to discuss whether or not meeting them would negatively impact our economy. I would suggest that we stop and think about another notion, and that is that the cost of protecting the public health is far less than the cost of breathing dirty air. When I was privileged to be Governor, and serve with this guy right here, we wrestled in my little State with what we could do in our State to try to reach attainment. We looked at the costs and how it would impact our in-

dustries in my State.

What I discovered and what has become even more painfully obvious today is that the costs of breathing dirty air are a far heavier burden on our economy than the cost of air pollution controls. According to a recent survey, during each of the summer months, when air pollution is at its worst, almost one in every five adult Delawareans are unable to work or carry out certain daily activities for one or more days. There are 46,000 in Delaware who suffer from asthma. Roughly half of them are children. They have difficulty breathing when they go outside to play because of their asthma. Three thousand children in my State under the age of four are hospitalized in Delaware each year.

That is just one small State on the east coast. The dirty air that millions of Americans are being forced to breathe is costing us dearly. It impacts our health, it impacts our productivity, it im-

pacts our quality of life.

The National Association of Manufacturers released a publication this month entitled, "Health Care Cost Crisis." The publication states, "The rising cost of health coverage is one of the biggest challenges manufacturers face today." I am going to leave here for a few minutes and slip out and walk into our Aging Committee. The CEO of General Motors, Rick Wagner, who tells me that the cost of health care for their company, for their employees, their pensioners, the families of their employees and their pensioners, actually costs more than not just the cost of the steel that goes into their cars, it costs more than all the capital investments they make around the world.

But in terms of solutions, the first quick fix that the National Association of Manufacturers offers is the following. Again I am going to quote. "Intensively managing chronic health care conditions, for example, diabetes, hypertension and asthma, can generate substantial cost savings and increase productivity." That is their quote. Let me say that again. According to the National Association of Manufacturers, one of the best ways for companies to save money, including General Motors, and increase productivity, is to address conditions like asthma.

What causes conditions such as asthma? According to the latest science, particulate matter is associated with premature death, aggravation of heart and respiratory disease, asthma attacks, lung cancer and chronic bronchitis. If we want to help manufacturers, and we do, we need to address these chronic health care problems. We need to do it now.

Unfortunately, once EPA finally decides on a new standard, areas will not need to comply with them for at least another decade. Some will be unable to get extensions until 2020. We need to begin addressing our air pollution problems today.

This is why I recently introduced, with a number of our colleagues, including Senator Lamar Alexander and Senator Chafee,

our proposal that we call the Clean Air Planning Act. Our proposal will cut sulfur dioxide emissions by 82 percent by 2015. Sulfur dioxide, as we know, is one of the major forms of particulate matter

that causes all of these chronic health problems.

Our legislation will reduce this pollution from 11 million tons emitted today from utilities to 4.5 million tons in 2010. In 2015, the powerplants will have to reduce emissions to just 2 million tons. According to an EPA presentation last fall, our proposal would cut the number of areas currently in nonattainment for particulate matter by over 70 percent by 2010.

Our bill will also greatly reduce ozone pollution. It will cut nitrogen oxide from 5 million tons today to 1.7 million tons in 2015. Today there are 126 areas in our Nation that exceed EPA's health standards for ozone. With these reductions, 10 years from now,

that number will be 11.

Unfortunately, we are not here to talk about what we can and should do today. Instead, we are talking about whether or not we should be doing something 10 years from now. I want to commend EPA for realizing that more needs to be done to adequately protect public health. I would implore you to carefully consider whether the changes you have proposed achieve that goal in a timely manner.

Thank you.

[The prepared statement of Senator Carper follows:]

STATEMENT OF HON. THOMAS R. CARPER, U.S. SENATOR FROM THE STATE OF DELAWARE

No one disputes that we've made significant environmental progress since the Clean Air Act was first passed into law. But our work isn't over.

Despite this progress, many areas of the country including Delaware—have significant air quality problems. In Delaware, the entire State exceeds EPA's health standards for ozone, and New Castle County doesn't meet EPA's standard for fine particulate matter.

I know a lot of people want to discuss the costs associated with attaining these standards, and that meeting them would negatively impact our economy. But the cost of protecting the public health is far, far less than the costs of breathing dirty

air.

While I was Governor, we wrestled with what we could do in our State to try to reach attainment. We looked at the costs and how it would impact our industries in the State. What I discovered, and what has become even more painfully obvious today, is that the costs of breathing dirty air are a far heavier burden on our economy than the costs of air pollution controls.

According to a recent survey, during each of the summer months when air pollution is at its worst, about 23 percent of adult Delawareans are unable to work or

carry out daily activities for one or more days.

46,000 adults in Delaware suffer from asthma. 23,400 of our children have difficulty breathing when they go outside to play because of asthma, and 3,000 children under the age of 4 are hospitalized by asthma each year.

That's just in my small, home State. The dirty air millions of Americans are being

That's just in my small, home State. The dirty air millions of Americans are being forced to breathe is costing us dearly. It impacts our health, our productivity and

our quality of life.

The National Association of Manufacturers released a publication this month entitled, Health Care Costs Crisis. The publication states "the rising cost of health coverage is one of the biggest challenges manufacturers face today."

In terms of solutions, the first "quick fix" the NAM offers is the following: "Inten-

In terms of solutions, the first "quick fix" the NAM offers is the following: "Intensively managing chronic health care conditions (e.g. diabetes, hypertension, asthma)

can generate substantial cost savings and increase productivity.

Let me say that again, according to the National Association of Manufacturers one of the best ways to save companies money and increase productivity is to address conditions like asthma.

And what causes conditions such as asthma? According to the latest science particulate matter is associated with premature death, aggravation of heart and respiratory disease, asthma attacks, lung cancer, and chronic bronchitis.

If we want to help manufacturers we need to address these chronic health care

problems, and we need to do it now.

Unfortunately, once EPA finally decides on a new standard, areas will not need to comply with them for at least another decade and some will be able to get extensions until 2020.

We need to begin addressing our air pollution problems today. That is why I recently reintroduced the Clean Air Planning Act. My proposal will cut sulfur dioxide emissions by 82 percent by 2015. Sulfur dioxide is one of the major forms of particulate matter which causes all of these chronic health problems.

It will reduce this pollution from 11 million tons emitted today to 4.5 million tons in 2010. In 2015, powerplants will have to reduce their emissions to 2 million tons.

According to EPA, my proposal would cut the number of areas currently in non-attainment for particulate matter by over 70 percent by 2010.

My bill will also greatly reduce ozone pollution. It will cut nitrogen oxide from 5 million tons today to 1.7 million tons in 2015. Today there are 126 areas in the Nation that exceed EPA's health standards for ozone. With these reductions 10

years from now that number will be 11.

Unfortunately, we are not here to talk about what we can and should do today. Instead we are talking about whether or not we should be doing something 10 years from now.

I commend EPA for realizing that more needs to be done to adequately protect public health. I would implore you to carefully consider whether the changes you have proposed achieves that goal.

Senator VOINOVICH. Thank you, Senator Carper. Senator Bond.

OPENING STATEMENT OF HON. CHRISTOPHER S. BOND, U.S. SENATOR FROM THE STATE OF MISSOURI

Senator BOND. Thank you very much, Mr. Chairman. I appreciate your holding this hearing today on the proposed revisions to the particulate matter air quality standards. As the Chairman has pointed out, our air is dramatically cleaner than it was 35 years ago. There is 50 percent less air pollution of the six major air pollutants together, including smog, soot and acid rain.

These pollution reductions come over the same time as the Chairman has pointed out that population increased by 42 percent, energy consumption by 48 percent, vehicle miles traveled by 178 percent and the economy grew by almost 200 percent. The President's legislation to cut smog, soot and mercury pollution from powerplants by a further 70 percent was blocked by this committee. If we are serious about it, we ought to be adopting the Clear Skies proposal.

But EPA is moving forward with regulations to cut powerplant air pollution by those amounts in the eastern part of the country. EPA has also implemented massive new pollution reductions requiring cleaner motor fuels and engines. Even now, States and regions are busy putting together plans to meet EPA's last round of pollution reduction requirements, which makes you wonder why EPA is back again with proposals for further reductions, when the current ones haven't even had a chance to be implemented. We have already been taking stringent measures to clean the air up even more.

As one who suffers from asthma, I can tell you that it is not the air that is the problem that I had, it is the food. There are foodborne allergies that are my problem. It is not the air. So when you

blame all of asthma on air, I don't think that you are covering the universe.

But for me, the important problem is that States are in a terrible crack. They strongly support, as I do, efforts to improve air quality and protect public health. My home State of Missouri and several other States, as you noted, Mr. Chairman, are terribly afraid of the pain that additional tightening of the standards will cause.

You will be introducing, I gather, a letter from Governors from my State and your State of Ohio in which they say that nonattainment designation will carry serious consequences that impact economic growth, jobs, mobility, energy prices, consumer choices and quality of life. They say, with this in mind, we urge you to proceed with extreme caution, extreme caution, as you consider whether to change the particulate matter standard. The final decision should be based on sound science and should appropriately balance scientific uncertainty with the joint benefit of people's health and livelihood.

These Governors are responsible for the environmental health and the economic health and well-being of their people. They say don't go so fast. We are making the environmental changes, but we need to take a look at the economic burdens that these are putting on these counties and the people who live in them and depend upon good jobs to get the healthy diets they need to deal with the many health problems that come from inadequate economic opportunities for them.

The proposals and suggestions to go farther than we are right now will carry serious negative consequences for families and workers, harming jobs, mobility, energy prices, consumer choices and the quality of life. If these new standards are more strict, they will be asked to write new plans to impose this pain before they are even finished with implementation of their latest plans. They also won't have a chance for their plans to account for the benefits coming from EPA's recent pollution reduction requirements. Doesn't it make sense to find out how far these new changes go, how much better the air gets?

The Governors recognize the serious disconnect between Washington and the real world. Shortly, we will get to see the head of the EPA's air program throw up his hands and say, it is not his fault, statute is making you do it. I understand that. Supporters of EPA's proposal correctly point out that a statute written 35 years ago and last amended 15 years ago requires this calamity. They point out and the Supreme Court agrees that the precise words of the statute require a review of the current standards, and that the pain and harm focused upon families and workers may not be considered.

The number of breadwinners losing their jobs may not be tallied. The number of struggling folks without transportation solutions to good paying jobs may not be tabulated. It is ironic to hear these arguments. They are happy to find a friend in Justice Scalia and his plain meaning of the statute approach. But how quickly they forget when nowhere in the Clean Air Act can they find the words "carbon dioxide." Or how quickly they walk away from the plain meaning of statutes when we consider, say, navigable waters of the

United States, to limit wetlands jurisdiction. Oh, no. Those words don't mean what they say, we will hear in a few weeks.

No complaints, either, when the Superfund law, intended to regulate and clean up industrial waste, is newly applied to farmers and livestock operations, a use never intended by Congress. Luckily, as we will see next week, there is plenty of health analysis to conclude, as EPA did, that the current annual soot standards of 15 micrograms per cubic meter is more than enough, more than enough to provide an adequate margin of safety requisite to protect human health.

I would urge EPA to heed the advice of the States and proceed with extreme caution as you consider whether to change the particulate matter standard. In the interim, I am glad, Mr. Chairman, we are exercising our appropriate oversight function. We have a duty to inform ourselves of what is at stake, who will bear the burden, how heavy that burden will be, who will be harmed and who will lose. As we will see from the witnesses today, many will be unfairly captured and many will be unnecessarily harmed by this proposal, or suggestions to go even further.

Thank you, Mr. Chairman.

[The prepared statement of Senator Bond follows:]

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These pollution reductions come over the same time the population increased by 42 percent, energy consumption rose by 48 percent, vehicle miles traveled rose by 178 percent and the economy grew by almost 200 percent.

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Even now States and regions are busy putting together plans to meet EPA's last round of pollution reduction requirements.

Which makes you wonder why EPA is back again with proposals for further reductions when the current ones haven't even had a chance to be implemented.

States are certainly scratching their head. They strongly support, as do I, efforts to improve air quality and protect public health. But my home State of Missouri, and several other States as you noted Mr. Chairman, are terribly afraid of the pain this will inflict on them.

This proposal and suggestions to go further will carry serious negative consequences for their families and workers harming jobs, mobility, energy prices, consumer choices and the quality of life.

States will be asked to write new plans to impose this pain before they are even finished with their latest new plans. They also won't have a chance for their plans to account for the benefits coming from EPA's recent pollution reduction require-

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I urge EPA to head the advice of the States and "proceed with extreme caution

as you consider whether to change the particulate matter standard."

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Thank you.

Senator Voinovich. Thank you, Senator Bond. Senator Lautenberg, thank you for being here.

OPENING STATEMENT OF HON. FRANK R. LAUTENBERG, U.S. SENATOR FROM THE STATE OF NEW JERSEY

Senator Lautenberg. Thanks very much, Mr. Chairman.

I am kind of pleased to be here and see us considering this subject. Because we have contrasting views, obviously, here. Members of the committee know that I feel rather strongly about protecting air quality. I hear the appropriate concern of my colleagues, for whom I have respect, even though I have differences, about the loss of jobs and the burden placed on industry to meet lower standards for, drop the bar for particulate standards.

Before I came to the Senate, my career included founding a business that now employees 44,000 employees in 26 countries, still headquartered in New Jersey. The company is called ADP, it is considered as one of the best companies in the country, with its financial condition. I say that not to brag, though I am happy about it. The fact is that I have some significant experience in job creation and understanding business. I don't concede anything when it comes to understanding the business side of the equation.

One of my children has asthma, and he is one of 6 million kids who are living with this disease. It is painful to see him stricken with an attack, reaching for the next breath. I consider it my responsibility to help him, to help Alexander and other children across this country to breathe easier. I think that is part of my responsibility here. The quality of our air affects the lives of those 6 million children every single day.

We heard confirmation of this from Senator Bond, about what the limitations that asthma brings, though he ascribes a different source than particulates as the responsibility for his asthma. But during the summer time, when most children are enjoying their vacation, playing outside, children with asthma often have to stay indoors. The reason that they have to stay indoors is that the air is just too dangerous for them to breathe. As a matter of fact, when I listen to the debate, I come up with that maybe we ought to send out a slogan that says, "Look, kids, you have to understand this, here is what you should do. Breathe harder, cough more, die

younger but stay indoors."

I don't think that is a good message. Ask the families who are related to those children who are stricken with asthma. Ask them what is the cost worth to keep their child alive or functioning as other children do. I am not suggesting there are hard hearts on the other side. I am saying that in the evaluation that we are making here that we have to decide whether or not the costs that will be increased perhaps by trying to conform to lower standards for particulates will be more than offset by the savings that we have in the future because of their reduced cost of health care.

According to a study from the Harvard School of Public Health, as many as 4 percent of premature deaths in the United States can be attributed to air pollution, the number that we get is over 40,000. That is an EPA number. Particulate matter is the deadliest kind of air pollution. The American Lung Association says that even low levels of particulate matter can lead to premature death.

Some of the deadliest particulate matter is also the smallest, almost invisible, as tiny as a 30th in width of a human hair. The study cited by the Lung Association revealed that the risk of mortality increases by 17 percent in areas with high concentration of these small particles, places like Los Angeles, Cleveland, Pittsburgh and my home State of New Jersey. High levels of particulate matter cannot only kill, they can cause all the discomfort that asthma and respiratory disease inflicts

ma and respiratory disease inflicts.

There are more than 2,000 peer reviewed studies linking particulate particle pollution to illness, hospitalization and premature death. So if anybody doubts the need to protect our families from particulate matter in the air, they simply aren't paying attention. Now, I am concerned that EPA's proposed revised standards for particulates may simply not be sufficient to protect the public. The Clean Air Act is one of our most important and successful environment and public health needs. I strongly oppose any effort to weaken or undermine the Act and the health protection that it provides for hundreds of millions of Americans.

When we banned smoking in airplanes, that created a public revolution against tobacco. I was assailed by people in the restaurant business and other business where people gathered in groups and saying, well, you know what is going to happen to our business, what is going to happen? There is no shortage of restaurants, there is no shortage of public gathering places. Life is better without the smoke that was created that we all ingest.

So it can be here also. I hope that we will adhere to the response from the Court as diligently as we can and reduce this cancer that pervades our society. Thanks, Mr. Chairman.

Senator Voinovich. Thank you, Senator Lautenberg.

Senator DeMint.

OPENING STATEMENT OF HON. JIM DEMINT, U.S. SENATOR FROM THE STATE OF SOUTH CAROLINA

Senator DEMINT. Thank you, Mr. Chairman, and thank you, Mr. Wehrum, for being here.

I will be brief, Mr. Chairman. I really want to relate to our comments, particularly. South Carolina is another State like Ohio that has had a difficult economic transition. We are trying to replace the textile industry, rebuild our economy. We have lost a lot of manu-

facturing jobs as well.

I would like to remind you, all of us, that quality of life is certainly related to people having jobs. When breadwinners lose their jobs, as my colleague has reminded me today, the ability to sustain your health and a good diet, a lot of things affect health, in addition to the air quality. We need to make sure that what we do here promotes a good quality of life. All of us support cleaner and cleaner air, everything we can do.

But if I can share what is happening in South Carolina, I think as you know, sir, that part of our State is designated unclassifiable because the data is not yet there to say one way or another. We are working very hard as a State and as a number of communities to do everything we can to clean up our air. We know some of it is coming from outside the area that we can't control. Some of it is naturally occurring. Some of it comes from Federal highways that come through our area, which we have little control of.

But we are trying to do those things we can control. We would ask that the EPA focus its resources on helping us clean up our air, helping us find those sources of pollution and helping us organize to do everything we can to provide cleaner air. The mere act of continuing to create stricter and stricter standards does not necessarily improve our air quality. What it does is reduce our quality of life. It has already diminished our job building capability because this unclassifiable standard has run off new business prospects.

So I appeal to you before you look at reducing or continuing to make the standards stricter, moving the goalpost, create a culture in your Agency to do what all of us want to do, and that is have cleaner air and a healthier environment for people to live in. But lowering the standards again is not going to do that if we have not taken the basic steps of finding out where the pollution is, what we can do to clean it up, and to put together those plans to make that happen.

We all want the same thing. But I don't think you are serving the public interest or the public health by just creating a standard that is going to be harder to attain when we haven't figured out how to do everything we can to attain the one we already have.

Mr. Chairman, I yield back. Senator VOINOVICH. Thank you. Senator Isakson.

OPENING STATEMENT OF HON. JOHNNY ISAKSON, U.S. SENATOR FROM THE STATE OF GEORGIA

Senator ISAKSON. Chairman Voinovich, I appreciate very much your leadership in calling this hearing and Assistant Administrator Wehrum, thank you for being here today and thank you for the times you have come to my office.

I want to thank Senator Lautenberg for his analogy, because it enables me to make a point that I was struggling with a good example to make. I commend him and I share with him the pride that I have on the restrictions on smoking that we have done that have improved the health of millions and millions of Americans. We need to understand, those restrictions attack the generator of the smoke, the person that smokes the cigarette. We didn't punish the victim of second-hand smoke.

We have a county commissioner from Georgia that is here today, Bebe Heiskell, of Walker County, GA. Walker County is in non-attainment in principal because of particulate matter and ozone that flows to her county from other points of origin. So we are punishing the victim of second-hand pollution, not the originator of that pollution, which is why when we measure these standards, we need to be careful about the impact and how they may arbitrarily actually punish people who have no control over the circumstances that they are in.

EPA has chosen to move the goalposts on States and communities that are diligently working toward implementation plans for current clean air standards. EPA has clear discretion not to change the standard and can set it at any level. EPA has instead chosen, in the face of evidence that shows the risk with particulate matter has decreased since 1997, to propose a 24-hour fine particulate standard that would add 530 counties, 67 of which are in my State

of Georgia, to the nonattainment list.

A nonattainment designation puts a stigma on the communities that is almost impossible to come out from under. The designation has resulted in current businesses closing up shop, new businesses avoiding the area, and the impact on the tax base has negative repercussions on the schools, the emergency services and the community.

I look forward to your being here today and to your testimony. I appreciate, as I said in my earlier remarks, your attention to Walker County and the attempts we have tried to make to bring about some reason in that judgment. I am particularly glad that Commissioner Heiskell is here today. This is an example of a county who, proactively under her leadership, entered into an early action compact to do everything they could do to remediate the circumstances they are the victim of, yet still were put in the nonattainment category, even though they voluntarily were making efforts to control something, some of which was not within their control.

Mr. Chairman, I again commend you on calling this hearing today and I look forward to hearing from the Assistant Administrator and from all those who have come from around the country to testify.

[The prepared statement of Senator Isakson follows:]

STATEMENT OF HON. JOHNNY ISAKSON, U.S. SENATOR FROM THE STATE OF GEORGIA

Thank you Chairman Voinovich. I want to commend you and your staff for calling this oversight hearing, and for your leadership this issue. I am pleased that we are having this hearing today to provide Congressional oversight of the EPA as they work towards a proposal that will cause significant economic damage to my State.

EPA has unilaterally chosen to "move the goalposts" on States and communities that are diligently working towards implementation plans for current clean air standards. EPA has clear discretion to not change the standard and can set it at any level. EPA has instead chosen, in the face of evidence that shows the risk with particulate matter has decreased since 1997, to propose a 24-hour fine particle standard that would add 530 counties nationwide, and 67 counties in my State, to

the nonattainment list. A nonattainment designation puts a stigma on these counties and communities that is almost impossible to come out from under. This designation has resulted in current businesses closing up shop and new businesses avoiding the area. The impact on the tax base has negative repercussions on the schools, emergency services, and community.

I look forward to hearing from Administrator Wehrum as to whether he and his Agency, when making these decisions that effect so many peoples lives, consider the "hidden costs" that I have mentioned above. I also look forward to his explanation of EPA's decision making on this process, and how they arrived at this decision.

I would also like to welcome Chairwoman Bebe Heiskell before the committee. Bebe is testifying on our second panel, and is the Sole Commissioner of Walker County, GA. Walker is one of only a handful of remaining counties in America that have only one Commissioner. Bebe has set precedence by being elected the first female Sole Commissioner in the State of Georgia and the first Republican County Commissioner of Walker County. She will give us first-hand evidence of the negative effects a nonattainment designation has on a rural county.

I have stated this in previous hearings but it bears repeating again: 60 percent of my State of Georgia's population lives in a nonattainment area. That is over 5 million people. Twenty-eight of one hundred fifty-nine of our counties, including Walker and Catoosa Counties in the mountains, through Metro Atlanta, and down to Muscogee County and the Metro Columbus area, are in nonattainment for particulate matter. Twenty-two of one hundred fifty-nine counties over the same geographic area are in nonattainment for ozone. This hearing is very timely, as air quality is an issue that Georgians in my State deal with every day.

And while it is not the topic of the hearing today, in my view a fix for these problems would have been passage of the Clear Skies bill. I am hopeful that we, as a committee, can come together and bring to the floor that legislation which in my opinion is better than current law.

In the meantime, I will stop here so that we can get to our witnesses. I look forward to hearing from the panels, thank Chairman Voinovich for his leadership to date, and yield back the balance of my time.

Senator Voinovich. Thank you, Senator.

Mr. Wehrum, we are very happy to have you here today. I would like to for the record mention that I think it is very unacceptable that there is a hold on your nomination and that you haven't been confirmed yet. Because I think you are highly qualified and we may have differences of opinion, but I think you are a very qualified individual who really cares about the job that he is doing. I apologize for the fact that you haven't been confirmed yet. Hopefully those holds will be taken off and you can be confirmed.

Before you testify, I am going to introduce into the record letters of testimony from 100 concerned public and business officials and associations from both sides of the aisle, including the Governors of Indiana, Alabama, Missouri, Georgia, Wyoming, Mississippi, Ohio and South Carolina; State representatives; county commissioners and mayors from Ohio and across the United States; Ohio Manufacturers Association; American Road and Transportation Builders Association; and many others that are very concerned about the proposed new rule.

[The referenced information follows on page 146–243.]

Senator VOINOVICH. Mr. Wehrum, you are familiar with this committee. If you would limit your testimony to 5 minutes, and of course, your entire testimony is part of the record.

STATEMENT OF WILLIAM WEHRUM, ACTING ASSISTANT ADMINISTRATOR, OFFICE OF AIR AND RADIATION, U.S. ENVIRONMENTAL PROTECTION AGENCY

Mr. Wehrum. Thank you, Mr. Chairman. I appreciate the opportunity to be here. Thank you, members of the committee.

I am pleased to be here today to discuss the proposed revision to EPA's National Air Quality Standards for Particulate Matter. The President has challenged our Administrator to accelerate the pace of environmental protection while maintaining our Nation's economic competitiveness. This proposed rule is a key part of our efforts to satisfy this mandate.

EPA sets national standards, which we call NAAQS, for particles and five other pollutants commonly found across the country. Together, the NAAQS serve as the foundation for the majority of our air quality programs, programs that have helped make America's air cleaner over the past 35 years, even as our population and econ-

omy have grown.

The Clean Air Act requires EPA to review the standards every 5 years and revise them as necessary. We are nearing the end of our latest review of the NAAQS for particulate matter. Under a consent decree, we must issue a final decision on the PM standards by September 27 of this year. EPA has proposed standards for two categories of particles. The first, what we call fine particles, or PM_{2.5}, includes particles that are 2.5 microns in diameter or smaller. As Senator Lautenberg pointed out, these are particles so small you typically can't even see them in visible air. Scientific studies have linked exposure to fine particles to a wide array of significant health effects, ranging from asthma attacks to premature death.

The second category, called inhalable coarse particles, includes particles larger than 2.5 microns and up to 10 microns in size. These particles have been associated with increased hospital admissions for respiratory symptoms and heart disease, among other

effects.

Our proposal would revise the 24-hour standard for fine particles to 35 micrograms per cubic meter of air, a significant strengthening over the current level of 65. EPA Administrator Johnson based this proposal on the large amount of research since our last review that linked short-term fine particle exposure to significant health effects.

As proposed, the annual standard would remain at its current level of 15 micrograms. New studies increase our confidence in the link between long-term exposure to fine particles and health effects. While we believe these studies do not support a standard higher than 15, we provisionally concluded that these same studies do not provide a clear basis for making the standard tighter.

The proposal for addressing inhalable coarse particles is more complex, in order to best reflect the available science on coarse particles and health. For these particles, we have proposed a 24-hour standard which would be set at 70 micrograms. This standard would apply where the coarse particle mix is dominated by particles from high density traffic on paved roads, industry and construction.

The proposed PM standards represent the Administrator's best judgment at the time of proposal of the standards requisite to protect public health with an adequate margin of safety, which is his obligation and our obligation under the law. The Administrator based that judgment on careful consideration of available science, key studies and recommendations of scientific advisors and staff. However, he recognizes that opinions differ on the appropriate levels, so our proposal requested comment on a range of alternatives.

Issuing a standard is just the first step toward improving air quality across our Nation. The second step, meeting the standards, is primarily the responsibility of States and local governments with assistance and guidance from EPA. We understand that a number of States are concerned about facing a new round of nonattainment designations, and Senator Isakson and Senator DeMint, you emphasized those concerns in your testimony. We are already working to ensure a smooth transition to any revised standards, so State pollution control efforts remain as effective and cost effective as possible.

Shortly after we proposed the revised standards last December, EPA began making plans for implementing potential revisions. As a first step, we issued a notice that sought comment on a number of issues related to transition. The notice also alerted States of the probable planning and compliance time line. Meeting the revised PM standards will require a combination of national, regional and local emissions controls. EPA already has issued a number of regulations that will help reduce fine particle pollution, including national rules reducing emissions from gasoline and diesel engines and a regional rule controlling emissions from electricity genera-

The President's Clear Skies proposal would make these regional reductions apply nationwide. These existing rules will help States make significant progress toward meeting the current PM standards. Those States needing additional reductions are assessing the nature of the nonattainment problems and are evaluating a range of local emission reduction strategies.

The steps States take now to meet the standards now in place also would help to meet any revised standards we issue in September. EPA is committed to working closely with the States as they work to meet current standards and any future standards, so we can continue America's progress toward clean, healthy air.

Again, thank you for the opportunity to be here, and I am happy to answer any questions you may have.

Senator Voinovich. Thank you, Mr. Wehrum.

Mr. Wehrum, in my request, and I appreciate you have been working with the State of Ohio and others to see what can be done to bring Cleveland, OH, into attainment with ozone standards by the required date of 2010, I understand this is a very complicated and resource-intensive process. What then would be the impact on States and localities if you moved the goalpost on them in the middle of the process? In other words, people are right now putting their State implementation plans and trying to figure out, how do we get this done. You come out with a new rule. How are they going to handle that?

Mr. Wehrum. Mr. Chairman, that is a very important question, one that we are focused closely on, and I know one that you and folks in your State and other States are focused on. As you know, when we proposed the revision to the PM standards, at the same time we issued what we call an advanced notice of proposed rulemaking to talk about implementation issues. Our goal, if we choose to change the standards, is to do it in the most thoughtful way we

possibly can. We realize there is an enormous challenge in place right now for many areas to meet the standards that we have in place. If we make the standards more stringent, it makes the chal-

lenge that much harder.

We are well aware of that, and we are going to work very hard to adopt the smartest, cleanest, most thoughtful implementation approach we can that dovetails the work that people are doing now to meet the current standards with what may additionally be needed to meet new standards if we choose to set them.

Senator Voinovich. We have discussed at length, EPA carefully established the Clean Air Interstate Rule to reduce powerplant emissions without causing undue economic and energy costs. We worked very, very hard with that rule, and of course, basically it captures, for the most part, what we were going to do with Clear Skies.

If you designate more numerous areas in nonattainment under this new standard, is your intention to amend CAIR or create some

kind of a new regime?

Mr. Wehrum. Mr. Chairman, if the Administrator chooses to revise the standards and make them more stringent, that will create an obligation on the States and ultimately EPA, if the States don't step up, to do an analysis of whether upwind sources, well, first of all, whether sources within their jurisdiction are significantly contributing to nonattainment in downwind States. Downwind States have an opportunity to do the same assessment and seek relief from EPA.

So the short answer is, the law requires the question to be asked, and ultimately, whether any change to the regional control strategies we have in place right now would be warranted or appropriate will depend on the facts and circumstances that are available at the time.

Senator Voinovich. Am I correct in assuming that you cannot consider cost benefit?

Mr. Wehrum. That is correct, Mr. Chairman.

Senator Voinovich. We are going to be having another hearing and I will be submitting a question to you. I am really interested to know, following up on Senator Lautenberg's statement, No. 1, with the new particulate matter that we already have set, what impact is that having in terms of public health; and No. 2, if a new rule came into effect, what would be the incremental benefit of that rule in terms of public health, in terms of some of the things that we have all talked about. I think it is something that we should know, and certainly we should be concerned about.

The other issue that we might as well get into, if we are going to talk about asthma, I would really like to have some authoritative statement about the issue of asthma. Because we have seen an increase in asthma, and I would like to know what it is that you folks think has caused the increase in asthma. I remember testifying way back when I was Governor about the whole issue of asthma and what caused it. There were some real differences of opinion about whether it was the ambient air or whether it was the physical condition that existed in homes.

There were some that argued that mites and other things within the premises where people live had a lot more impact on their asthma situation than the air situation. There were others that argued that it would be cheaper to buy everyone an air conditioner than it would be to put in new things that would clean up the air in terms of really making an impact. I think Senator Isakson made a real good point when he talked about the cigarettes, you dealt with the person that was causing it, you didn't penalize the rest of the folks.

So these considerations are really important to us. I wouldn't want anyone to think that I am not sensitive to the health care needs and to the costs that are involved. But I do believe that we have to use common sense, and we also have to understand that some of these folks aren't going to be able to even reach the current standard.

Senator Carper.

Senator CARPER. Thanks, Mr. Chairman.

Let me start again by thanking you for your testimony and for your staying with us to respond to some questions. I just want to confirm with you if I could that it is the conclusion of the Environmental Protection Agency that the fine particulate matter standards need to be strengthened to better protect public health. Is that correct?

Mr. Wehrum. Senator, as you know, we have proposed changes to the current suite of particulate matter standards. We have not yet gotten to the point where final decisions have been made and the final action has been signed and published. So we are in the deliberating process still. Our proposal reflected a tentative assessment based on a review of the science and other relevant factors that were available to us at the time of proposal.

We of course have had a lengthy public comment period and opportunity for public hearings, and right now we are in the process of reviewing the information that we received in the public comments.

Senator CARPER. OK, that is fine. Thanks very much.

Mr. Wehrum. Sure.

Senator CARPER. I want to better understand this Clean Air Scientific Advisory Committee, who they are. Talk to us for a very short while, tell us about this committee. Who are these folks? What have they done in terms of their deliberations to allow them to make their recommendations?

Mr. Wehrum. Sure, Senator. The Clean Air Science Advisory Committee, what we call CASAC, is a scientific advisory group that is required to be created under the Clean Air Act. Its specific purpose is to advise the Administrator on the science associated with the criteria pollutants and to make recommendations with regard to the science and on the policy associated with applying that science.

Senator Carper. Is it a big group? Is it a little group? Are they scientists? Who are these folks?

Mr. Wehrum. The law requires, it actually specifies the number of folks that have to be on CASAC, and it specifies the type of folks that have to be on CASAC.

Senator CARPER. Share with us just a little bit of that, real quickly.

Mr. Wehrum. There has to be someone representing States, there has to be someone with toxicological experience and epidemiological experience, and a medical doctor. So the idea behind the statute and the way in which we use CASAC is to convene a body of experts with diverse experience in air quality issues, a group of experts who can look at the science and understand the science and the policy implications and give us advice.

Senator CARPER. The recommendations that they have made for revising the standards, the 24-hour standard and the annual standard, give us some idea, is this something that they decided to do

quickly? Did they do a fair amount of deliberation?

Mr. Wehrum. CASAC is involved through many aspects of our rule development process. When we set standards, when we think about changing standards, it is a much more involved process than the typical rulemaking we might do for other reasons under the Clean Air Act, like setting emissions standards. It starts with a detailed assessment of the science and development of what is called a criteria document that is intended to be a summation of all the relevant science. That work is actually done by our Office of Research and Development, not my own.

CASAC is involved in the reviewing of the draft criteria document, provides comments and their own assessment of whether the right science has been identified and whether the science is being interpreted in an appropriate way. Once the criteria document has been developed, then that is translated into a set of policy recommendations, typically through what is called a staff paper, which is prepared by folks in my office. CASAC is involved in reviewing drafts of the staff paper and giving their recommendations as to whether the science and other related information is being applied properly.

Senator Carper. Thanks. Again briefly, who appoints the folks to

CASAC?

Mr. Wehrum. I am sorry, Senator?

Senator CARPER. Who appoints the members to CASAC?

Mr. Wehrum. The Administrator.

Senator Carper. OK. Now, I understand according to the Clean Air Scientific Advisory Committee recommendations concerning the proposed National Ambient Air Quality Standards for particulate matter, it was again recommended that EPA revise the annual particulate matter standard from, I think it is 15 micrograms per cubic meter down to a range of anywhere from 13 to 14. However, EPA chose not to take the advice of the committee that you have just graciously described for us.

Can you explain the rationale behind ignoring the committee's advice on this point? I know you have made some changes with respect to the 24-hour standard. But can you just explain the rationale behind ignoring the advice of the commission, those charged with making these recommendations, based on what appears to be

their extensive knowledge of the science?

Mr. Wehrum. Yes, Senator. It is important to point out that the law does not require the Administrator to take the advice of CASAC. In fact, the law anticipates the Administrator may choose to do something different than what CASAC recommends, and puts an obligation on the Administrator to explain if he takes final ac-

tion that is different than what CASAC recommends, to provide an

explanation as to why that is the case.

The body of science available on particulate matter is enormous. That is a great virtue at this point in time. When the standards were set back in 1997, there was a relative dearth of information, and that made it particularly challenging to decide whether to set a standard and where to set the standards. A tremendous amount of research has been done from 1997 to the current day, which is a great benefit to us. But it in and of itself presents a challenge, because it requires very knowledgeable people to look at the science and think about it in a very complex way and draw conclusions as to what they think that science suggests in terms of keeping the standard or changing the standard.

We highly appreciate the input of CASAC. They are a very important part of our process. We have great respect for the people

in CASAC and the advice that they give us.

But in this case, we disagreed with their recommendation as it relates to the annual fine particle standard, and that is for the reason simply that I stated in my testimony, which is we believe that the science does not suggest that a loosening of the standard is appropriate, but we also believe that the science does not provide a clear indication that the current annual standard for fine particles needs to be adjusted downwards.

Senator Carper. All right, thanks. If I could, Mr. Chairman, just a quick concluding statement. Mr. Wehrum, in your testimony, you assert that somehow the passage of Clear Skies would improve upon current Clean Air rules. However, according to the analysis the EPA conducted last year that you were good enough to present to us, that doesn't necessarily seem to be the case. The analysis that you showed us shows that current law will reduce the number of areas in nonattainment for particulate matter from I think 39 to 21 by 2010.

Clear Skies' proposal, on the other hand, would reduce the number of areas in 2010 from 39 to 20. While I agree we need to pass legislation and establish a national program, we also need to pass legislation to actually address the Nation's clean air problems. According to what I believe to be your Agency's own analysis, I would just respectively observe that Clear Skies just doesn't get that job done.

But again, thank you for being here this morning. Thank you for letting me run a minute or two long.

Senator Voinovich. Thank you, Senator Carper.

Senator DeMint.

Senator DEMINT. Thank you, Mr. Chairman, and Mr. Wehrum, thank you again for being here and your testimony.

Just a couple of questions. Is it true that the air in this country is cleaner now than it was a decade or two ago?

Mr. Wehrum. Yes, Senator, that is true.

Senator DEMINT. But it is also true the incidence of asthma has increased as the air has gotten cleaner.

Mr. Wehrum. That is my understanding, Senator.

Senator DEMINT. So it is very difficult, I guess, then statistically to suggest that the air quality is the cause of asthma.

Mr. Wehrum. Senator, you as well as Chairman Voinovich have raised a very complex question. Asthma is obviously a very important issue. According to the information available to me, the incidence of asthma appears to be increasing while air quality undoubtedly has been increasing over the same period of time.

What we do know is that there are a variety of triggers that at least cause people to have asthma episodes and not all of them are related to air quality. They can be related to other factors, as

Chairman Voinovich pointed out.
Senator DEMINT. Clearly, it would be difficult to make the case for tighter, stricter standards because of the rise in the incidence

of asthma, I would say.

Mr. Wehrum. Senator, the science of particulate matter does show that there is an association between exposure to particulate matter and an increase in a variety of respiratory ailments, including asthma episodes. So my point is, asthma is a very complex issue. I would be more than happy to provide a detailed response on the record. But at the end of the day, there is an association, Senator.

Senator DEMINT. Let me ask another question related to science. I think you have indicated in your testimony that there is no scientific data that EPA has that would suggest you raise or lower the standards?

Mr. Wehrum. It was the Administrator's judgment at the time of proposal that at least for the annual fine particle standard that the available science did not create a clear rationale for adjusting the standard, or making the standard more stringent than the cur-

rent level of 15 micrograms.

Senator DEMINT. What could be the rationale to create a stricter standard at this time?

Mr. Wehrum. Senator, as I explained a second ago, reasonable minds can and do differ when they look at the science that we have available and what that science would suggest as to where the standard should be set. So we got any number of public comments, including from public health groups, environmental groups and the others who assessed the science and suggested to the Administrator that it would be more appropriate to conclude that the science would support and in their view mandate an adjustment to a lower level than we currently have.

So the sum of my answer is, there are people who are aware of the science and are fairly knowledgeable in the field, and they have made the recommendation to us through public comments that the

standard should be adjusted downward.

Senator DEMINT. Adjusted downward. Just quickly, if you could speak on, what is the role of the EPA, the strategy of the EPA to actually identify those companies that are generating pollution and what is the role of the EPA to actually help the communities clean up? I know you can set a standard. But is it the mission of the EPA to actually help clean the air?

Mr. WEHRUM. Senator, I think we help in a couple of ways, probably more than a couple. On the one hand, there are certain areas where we regulate that State and local jurisdictions don't. We set vehicle standards for cars and trucks and other types of mobile sources. They are nationally applicable and result in substantial reductions in the emissions, the kind of pollution we are talking about right now, and help areas to attain the standards, if they are

not currently attaining.

The regional powerplant control strategy we have been talking about, CAIR, is another good example of that, where we adopted a regulation in a circumstance where it wasn't within the authority of State and local jurisdictions to do that. So the standards we set help, and they help a lot in some areas. But almost inevitably, when an area has bad air quality, it is a combination of stuff outside the control, sometimes stuff blowing into the area from upwind, and maybe cars and trucks which local jurisdictions tend not to regulate, a combination of those sorts of things, which we try to deal with.

Then there are local sources, local industry and other types of emitters. In that case, the law puts primary responsibility on the State and local jurisdiction to identify those sources and devise the control strategies that are necessary to get the reductions that are needed. Even in that circumstance, though, we try very hard to provide assistance. We know a lot about emissions, we know a lot about where they come from, how they can reasonably be controlled, and we try to make that information readily available and

provide assistance to State and local jurisdictions.

Senator DEMINT. Thank you. Mr. Chairman, I yield back.

Senator Voinovich. Thank you, Senator DeMint.

Senator Lautenberg.

Senator LAUTENBERG. Thanks again, Mr. Chairman, for giving us a chance to air this problem.

Mr. Wehrum, did EPA consider costs when it selected the health standards for particulates that it proposed?

Mr. Wehrum. No, Senator.

Senator LAUTENBERG. You said different people disagree with whether or not it is essential that the standard for particulate matter be reduced. How do you feel about it? What is your view?

Mr. Wehrum. Senator, my honest answer is, we are in a deliberative part of our process right now. What we have said from the start is we felt like we owed the public and other interested folks an answer as to what our tentative view was at the time of the proposal.

Senator Lautenberg. So you are saying there isn't enough evidence to this point that you see that says, hey, we ought to get on with reducing this, we could do some good for the health of the people who live in our country? You are not satisfied that we are at that point now?

Mr. Wehrum. Senator, I guess what I am trying to say is, at the time of the proposal, we provided the clearest indication we could as to what our tentative judgment would be, given the information we had available at the time of the proposal. But we asked for comment on several alternative outcomes, more stringent levels.

Senator Lautenberg. Thank you. Thanks, Mr. Wehrum.

In January of this year, the Federal Register, there is an EPA report and it says, taking the above consideration into account, the Administrator proposed to set the level of primary 24-hour PM_{2.5} standard at 35 micrograms per cubic meter. In the Administrator's

judgment, based on the current available evidence, a standard set at this level would protect public health with an adequate margin of safety from serious health defects, including premature mortality and hospital admissions for cardiorespiratory causes that are causally associated with short-term exposure to PM_{2.5}. This is a judgment by the Administrator.

EPA issues a report that says, stronger standards mean fewer deaths in nine cities studied. Source, U.S. EPA particulate matter health risks, assessment for selected urban areas, Appendix A. PM data, this is June 2005. They say that, with the current standards, the number of deaths from $PM_{2.5}$ in nine U.S. cities, 4,700. I am

rounding the number.

But CASAC, the committee of concerned scientists, most protective recommendation would reduce that 4,729 down to 2,476. This is an EPA report. EPA's most protective option and American Lung Association recommendations go further, that could mean 86 percent fewer deaths. Down to 644 from 4,729. This EPA, I guess they are a little funny over there.

Is that a conclusion that you support? The Agency supports it? Mr. Wehrum. Senator, I believe you are quoting information from a risk assessment that was prepared by the Agency as part of the full suite of information that was developed to support the proposal that was made at the end of last year. The purpose of the risk assessment is to attempt to identify what sort of public health benefit could be achieved by adjusting the standard to various levels.

Senator LAUTENBERG. Well, they said it could be substantially reduced. Do you agree that these numbers are what they are? I mean, it is printed here.

Mr. Wehrum. Senator, the risk assessment has to be viewed in conjunction with the other available information. Most importantly, the evidence of health effect at various levels, which is primarily provided by epidemiological studies and supported—

Senator LAUTENBERG. The Agency may be satisfied or may conclude that this information is reliable, but you, I understand you

are not certain of it. I appreciate your view.

To my colleagues, I don't understand one thing. When it was said that the victim is being punished, the victim being a particular county in the State of Georgia, as I understood it, and why are they being punished if those who emit those particulate matters, whether it comes from trucks or powerplants or otherwise, those are the ones that we are asking to reduce the amount of material that is sent out there. Why does that punish—you don't have to answer this, Senator, it is just an observation of mine—but why does that punish the victim?

Finally, I think that there are times in life, in the life of a country like ours when conditions change and we become more aware of the things that we are doing, smoking, for instance. Smoking kills over 400,000 people a year prematurely. When people realized the danger, it took to people hiding in corners because they were ashamed of their smoking habits. It took that kind of exposure to

bring about change.

I wrote that law in 1986. It still has not, until now, reduced the number of smokers, young people that startup. So it takes a while.

But even as we expand our economy, expand the numbers in our society, expand the number of miles driven, I say that we have to do it in a better way. When we talk about job loss, I would like to see what the job loss to India has done to reduce jobs in America or other cheap places for labor, and the kinds of environmental standards they impose on those people who work in those shops throughout the world.

That is to my very good friend, and one I have great respect for, the Chairman of this subcommittee, he is a fellow who knows a lot of information, studies his subjects very carefully. But those situations help reduce the number of jobs in America, certainly reduce

tions help reduce the number of jobs in America, certainly reduce the wages. So we have all kinds of things that we are working on. But the one that we control the most is what we can do with EPA. I think we ought to get on with it, conscious of the cost, conscious of the job loss that might be there, and try to help replace those jobs and replace those facilities in some way.

Senator Voinovich. Thank you, Senator.

Do you want to take the stand?

Senator ISAKSON. When great leaders like Senator Lautenberg initiated smoking reduction laws, they reduced the places where smokers could smoke, and they created better environments for those who didn't smoke by restricting it. They didn't penalize the

people who were the victim of second-hand smoke.

Now, in specific answer to your question, and I just used your analogy because I thought it was a good one, Commissioner Heiskell here in Walker County, GA, is south of Chattanooga, a city in another State, is near an interstate highway and is in a part of the south that is under the Bermuda High that in the summer causes the Smoky Mountains to be the Smoky Mountains, because it traps particulate matter and other pollutants that end up being generated lots of other places.

So my example was this. Commissioner Heiskell, under her leadership, she is the sole county commissioner, voluntarily went into an early action compact with the EPA and has generated studies which we have submitted showing points of origin of pollution that have nothing to do with Walker County, GA, and in some cases

nothing to do with the State of Georgia.

So my question was, and the Administrator here has just said, I believe, that in the end, this is in the judgment of the Administrator, CRS has said that is in the judgment of the Administrator, they have taken all of this data to determine this is the standard they are going to recommend. It is an inflexibly rigid process that in the case of the real example I just stated, penalizes the victim of second-hand pollution, maybe not second-hand smoke. So that was the reason for the analogy.

Reclaiming the rest of my time, I will use that as a preface to a question. I guess I will go back to something you just said about cost. Again, Senator Lautenberg set me up for this, so I will do it the best I can. He asked you if you considered cost in making the determination and you said no. I would like to ask your opinion. In your opinion, since cost wasn't considered, but in your opinion, if these standards go into effect, will the cost of energy in the United States of America increase?

Mr. Wehrum. Senator, if we have done that analysis, I am not aware of that analysis.

Senator ISAKSON. I know you haven't, because you said you

haven't. But I was just wondering about your opinion.

Mr. Wehrum. Senator, that is a difficult question to answer without doing the analysis. I would be more than happy to answer on the record.

Senator ISAKSON. Well, the reason I ask the question is this. No one in this room is for asthma or for a less than healthy environment. No one in here is shilling for one side or another in the economics of the matter. But I think it is important to understand that economics didn't go into the consideration and that there are economic impacts. I would suggest, and I think you will hear when these people testify later, there are significant economic impacts. Nobody wants the air to be dirtier. Everybody is proud that we are cleaner than we were 10 years ago, and hope 10 years from now we will be cleaner than we are today, which we will if we continue.

But if we stop considering all the contributing aspects of a decision, and only focus it on a narrow part of the environment or a narrow part of the question without all considerations, we create the unintended consequences of having some awfully detrimental things happen to people who have basically little if any control over

what they are doing. In this case, again, Walker County.

I am not shilling for the commissioner. She can do a fine job on her own. It just happens to be a circumstance that I think Senator Voinovich mentioned in one of his examples. There are areas of the country where there are communities in that trap. If it is in the judgment of the Administrator, hopefully flexibility, given the broad census of information, can be used to help communities be able to try and come out from under nonattainment, especially when they are making every effort to do everything they can within their control.

So I ended up not asking a question and making a speech, and I apologize for that. But since I was asked, I thought I would try and put it in perspective. I yield back, Mr. Chairman.

Senator Voinovich. Thank you, Senator Isakson.

Mr. Wehrum, thank you very much for being here. I have some other questions that I am going to be submitting to you in writing.

Senator ISAKSON. Mr. Chairman, I need to correct the record if I can. I ask unanimous consent that in one of my references, I named Walker County as Murray County. Can I correct the record and make it be Walker County in all circumstances?

Senator Voinovich. The record is corrected. Also, Senator Carper asked me to insert for him some information here from the National Association of Manufacturers. Without objection, that will be done.

Senator Lautenberg. Mr. Chairman, may I ask also that this chart that was put out referencing.

Senator VOINOVICH. Without objection, so ordered. [The referenced information follows on page 130.]

Senator VOINOVICH. Unfortunately, we have a vote. So I am going to have to recess the hearing and scoot back here and we will have our next group of witnesses. So I am going to recess the hearing for the time being.

Thank you again, Bill.

Mr. WEHRUM. Thank you, Mr. Chairman.

[Recess.]

Senator Voinovich. First of all, I want to thank you all very much for being here. I have been in your position when I was a Mayor and Governor, and it just seems like you wait around and wait around and wait around, and then you have 5 minutes to get your story out. Ms. Heiskell, I am going to ask you to come on third, because I ran into Senator Isakson, and I think he would want to hear your testimony. I hope he is back by then, he said he is coming back.

We will start out with Mr. Paul, and we welcome you. Mr. Paul is from Dayton, OH. It is very interesting that we have two witnesses from the great State of Ohio today. I have enjoyed working with Mr. Paul on our DERA legislation. Hopefully we are going to get a little bit more money for that, Mr. Paul, so that we can do something about really making a difference in terms of particulate matter, and that is dealing with these on and off road trucks, so we can get them to put on some controls. So we are glad to have you here today.

STATEMENT OF JOHN A. PAUL, SUPERVISOR, REGIONAL AIR POLLUTION CONTROL AGENCY, DAYTON, OH

Mr. PAUL. Thank you, Mr. Chairman. We certainly pledge to con-

tinue to work with you on those efforts.

My name is John Paul and I am the supervisor of the Regional Air Pollution Control Agency, RAPCA, representing the health departments of six counties centered in Dayton, OH. I also serve as the president of ALAPCO, the Association of Local Air Pollution Control Officials. Whereas I am appearing here today on behalf of RAPCA, I will mention that my testimony is endorsed by ALAPCO and our sister organization, STAPPA.

Particulate matter is not only one of the most serious air pollution problems facing our Nation, but it is also one of our Nation's most serious environmental problems. Since the standard was last revised in 1997, there have been over 2,000 peer reviewed scientific studies identifying significant health effects of particulate matter.

In December 2005, over 100 scientists and public health professionals wrote to EPA citing the serious health effects of fine particulate matter at levels well below the current standards. These include, among other things, respiratory problems, strokes, lung cancer and thousands of premature deaths. EPA estimates that more than 4,700 people die prematurely each year in just 9 cities at the current PM levels.

With these health effects in mind, it is essential that Congress and EPA retain the current process for setting national ambient air quality standards and resist attempts to inject costs into the establishment of these health based standards. The public deserves to know whether the air they breathe is safe. RAPCA's staff reviewed EPA's proposal to revise the PM NAAQS and were deeply troubled by several major aspects, including the level of the PM_{2.5} standard and the exemptions that EPA has proposed.

First, we are very concerned that EPA is ignoring the recommendations of CASAC, to tighten the PM standard to below 15

micrograms per cubic meter. Second, we strongly oppose EPA's proposed exemptions for major source categories, such as agriculture and mining, from the coarse PM standard. Consideration of exemptions should be done during the implementation process when costs are factored, not during the process of setting a national health base standard.

Third, we are very troubled that EPA is proposing to exempt major portions of the country, those with fewer than 100,000 people, from monitoring for coarse particles. This action dismisses the health and welfare of millions of people throughout the country, in some cases nearly an entire State.

Once EPA sets new standards, areas will have until 2015 to attain the new fine particle standards, and until 2018 to attain the coarse standard, with the possibility of extensions for 5 or more years to 2020 and beyond. In the meantime, States and localities are now in the process of developing SIPs to meet the existing PM standard, established in 1997.

We believe there are several actions Congress and/or EPA can take now to help us in this effort and also make progress toward meeting the new standards. First and most importantly, we urge the EPA to require further cost-effective reductions from the electric utility sector, as well as from other promising sectors for national regulations, starting with industrial boilers and cement kilns. While EPA took a good first step in publishing its Clean Air Interstate Rule, CAIR, it is deficient in several aspects: the compliance deadlines are too long, the emission caps are not sufficiently stringent, and it covers only utilities in the east and ignores other large sources.

To the extent that a Federal rule like CAIR falls short of what can be achieved in a cost-effective and timely manner, those lost emissions reduction opportunities will have to be made up by some other sector of the economy, generally a small business, for which the costs are much higher.

Second, we need EPA to finalize its PM_{2.5} implementation rule.

EPA has been working on this for several years.

Finally, Congress and EPA must ensure that State and local Agencies have adequate funding to do their jobs. This is particularly important at a time when agencies are significantly expanding their responsibilities, including developing PM_{2.5} SIPs. Unfortunately, the Administration's fiscal year 2007 calls for cuts in State and local Agency grants of \$35 million below last year's level. We urge the Senate to fully restore these cuts, and we appreciate your efforts, Chairman Voinovich, in this regard.

Furthermore, we applaud you and your colleagues on the Environment and Public Works Committee for your work on the Diesel Emission Reduction Program. I thank you for this opportunity to testify, and I will be happy to answer any questions.

Thank you.

Senator Voinovich. Thank you, Mr. Paul.

Mr. Gould is the chairman of the Lenawee County Board of Commissioners. Thank you for being here.

STATEMENT OF LARRY J. GOULD, CHAIR, LENAWEE COUNTY BOARD OF COMMISSIONERS, LENAWEE COUNTY, MI

Mr. GOULD. Thank you.

Mr. Chairman and members of the subcommittee, my name is Larry Gould. I am chairperson of the Lenawee County Board of Commissioners, and thank you for this opportunity to testify today.

Lenawee County is largely a rural county located near a major metropolitan industrial area. As a consequence, Lenawee County has been designated by EPA as a marginal nonattainment county for EPA's 8-hour-ozone standard. Fortunately, Lenawee is not designated as a nonattainment, at least not yet.

Senator Voinovich. Mr. Gould, would you do me a favor? I am having a hard time hearing you. Could you pull your microphone

up a little closer to your mouth?

 $^{\circ}$ Mr. Gould. I am very concerned that a revision of the PM_{2.5} standard by EPA would result in Lenawee County being designated a nonattainment for PM_{2.5} for the same reason the county is designated as a nonattainment for ozone. That is, Lenawee would be included in a multi-county nonattainment area, whose air quality is dominated largely by emissions from more healthy, populated counties with more industry.

Even though it is not our fault, Lenawee will be forced to comply with restrictions that are likely to impede our attempt to attract new industry and expand our economic base. According to the Michigan DEQ, three counties with particulate matter materials currently show violations of the 24-hour standard proposed by EPA. I am aware of estimates suggesting that even a modest revision of both the 24-hour and the annual PM_{2.5} standards could more than double the current number of nonattainment counties in Michigan from 7 counties to 16 counties. Lenawee would be one of those nonattainment counties.

As a consequence, Lenawee, a rural county with a small population, would be in nonattainment for both ozone and revised $PM_{2.5}$ standards. This is not a prospect I look forward to as the chairperson of the Board of Commissioners. Costs of implementing and complying with air quality standards are borne to some extent by State and local government. Those costs are unfunded Federal mandates. For example, the Lenawee Board of Road Commission informed me that highway funds made available to Lenawee County through the Congestion Mitigation Air Quality funding to improve air quality appeared to be a drop in the bucket compared to the funding that will be needed if EPA makes the 1997 standards more stringent.

In addition, the Michigan Association of Counties informs me that any revised particle matter standards which would impose additional costs on counties would be impossible for them to support unless Federal funding is increased. I believe that imposition of a new nonattainment requirement would have a negative impact on economic growth and development in Lenawee County. Like most counties in Michigan, Lenawee continues to struggle with the high unemployment and uncertain economy. The Lenawee Chamber for Economic Development has written me recently to express their concern about the negative impact to our local economy if EPA re-

visits the $PM_{2.5}$ standard.

The Chamber points out the continual loss of manufacturing plants in Lenawee. Most of those plants were old and relatively old technology. If Lenawee is classified as a nonattainment county, the Chamber feels that we will continue to lose jobs and find it difficult to attract facilities with newer and better environmental controls. In fact, the Chamber estimates that a nonattainment designation

could result in a potential loss of over 1,000 current jobs.

A \$60 million ethanol plant is currently under construction in the southeast part of our county. A biodiesel blending facility is planned for construction in Adrian, our county seat. We plan to double the capacity of the ethanol plant some time in the future. But I am very concerned that expansion may face serious implications if Lenawee County is designated in nonattainment for $PM_{2.5}$. Because if it becomes a blending only, I am not hopeful but not confident that the biodiesel facility will not encounter any problems.

In closing, I would urge Congress and the EPA to give State and local government all the administrative and financial support they need to implement the existing standards rather than change the standards now. Thank you, Mr. Chairman and I am available for questions.

Senator Voinovich. Thank you very much for being here today. Senator Isakson, I delayed hearing the testimony from Ms. Heiskell, because I figured you would want to hear her. So Ms. Heiskell, you are on.

STATEMENT OF BEBE HEISKELL, COMMISSIONER, WALKER COUNTY, GA

Ms. Heiskell. Good morning, Chairman Voinovich, members of the committee. My name is Bebe Heiskell. I am the sole commis-

sioner of Walker County, GA.

We are located in the northwest corner of the State, just south of Chattanooga. I am in my sixth year of elected office, with a background of 27 years in public administration. Thank you for allowing me to describe the impact that nonattainment designations have on communities like mine.

Walker County is a vibrant community of 63,000 people. A variety of national and international manufacturers have operations there, and our corner of the State produces a vast majority of the world's carpet. Forty-six percent of Walker County's work force is

employed in manufacturing.

The hardest part of my job is funding the delivery of services, such as road maintenance and meeting payrolls. I am where the rubber meets the road, face-to-face every day with the taxpayers that support our governments. They recognize the property tax re-

lief that a strong local economy provides.

Quality growth is vital to Walker County, and other communities all over this country. From an economic development standpoint, being in nonattainment $PM_{2.5}$ has serious consequences right now. Many industries begin a site location search using EPA's Internet list of counties in nonattainment. Those counties never make the list of prospect sites.

Walker County's nonattainment status is almost exclusively due to outside forces on our air quality, including up to 60 percent natural particulate matter, completely out of our control, that comes from other continents. We are positioned between Chattanooga and Atlanta, two major interstate highways and several large manufac-

turing facilities and powerplants in the region.

During its foundry era, Chattanooga was one of the dirtiest cities in the United States, with all the associated health issues. Now it is one of the 10 best places to live in the entire country. The businesses in my community have invested millions to reduce their emissions. Cars are significantly cleaner than they were even 10 years ago. Powerplants have spent billions on controls, and the two large metropolitan areas surrounding us have come into compliance with the 1-hour-ozone standard.

As a community leader and an asthmatic, I appreciate all the EPA has done to see that we have cleaner air. Their own status report, September 2004, boasts that the U.S. air is the cleanest ever since 1970, even while the economy has expanded 150 percent in that time period. American businesses should also be commended for their accomplishments. Though our air quality is improving, I see job losses that stem from perpetual nonattainment. This adds to the complexity of local governance, while we struggle with public opposition to these nonattainment designations, and many of our jobs go overseas.

Walker County has more than 4 million square feet of vacant manufacturing space in large measure because of uncertainty our nonattainment designation creates for business prospects. Those are jobs we cannot recover. The ultimate cost of EPA's efforts, though, will be borne by American workers in local communities who will shoulder the burden of increased unemployment and sig-

nificant increases in the basic cost of living.

Georgia's late Senator Paul Coverdale said, "Investment does not flow toward uncertainty." A never-ending nonattainment designation creates uncertainty for communities and businesses.

I urge the Senate Committee to put EPA's standards in perspective with the loss of jobs and decisions of manufacturers to go abroad where there are no standards. The doubling of the global workforce has created greater competition for each available job. Retraining displaced workers that have lost their lifelong manufacturing jobs is difficult. These people, the ones we represent, are then concerned only about how they can take care of their families.

Does EPA make decisions based upon the demands of outside environmental groups, or is there a practical reason to continue to

lower this designation?

I ran for office on quality growth, and I am a long-time supporter of the environment. However, there must be a balance in all things. Please consider the significant air quality improvements already in place against the impacts of unending nonattainment designations before allowing EPA to stack another set of regulations on businesses and communities like mine.

I must add candidly that 50 percent of our economy in Walker County is from agribusiness. A beekeeper told me last week that for every three bites you put in your mouth, pollen is responsible for two. A high level of pollen in our monitors indicates we are

Thank you for hearing my remarks.

Senator Voinovich. Thank you very much for being here.

Mr. Gould, I noticed you have, it looks like yellow corn there in that bottle.

Mr. GOULD. Yes, Senator.

Senator Voinovich. I understand from your written testimony that if the county is designated as nonattainment for revised particulate matter, you think that may have an impact on your eth-

anol project?

Mr. GOULD. Yes, sir. I want you to know I had to take off my shoes yesterday morning to get here when I entered two commercial flights. This did not have any problems going through the two commercial flights. I have not had any problems. Let me tell you, this is how safe this product is. This is what is going to clean up our environment.

Yes, Great Lakes Ethanol, in choosing to set a site for an ethanol plant in Lenawee County, visited a number of sites. Many of the sites would have never, ever complied under the current funding of the 8-hour ozone. We knew that. We did have to search out and get a more modern company, I mentioned it in my testimony, about the technology of the older plants. In today's society, they can't make it, we are losing jobs.

We feel that we are ready to expand. We don't need \$3 a gallon of gas to produce this. This is much less than \$3. We will have a problem if we have to have PM_{2.5}. That will create a little bit of a problem for us, probably, in the repermitting to double the expansion. We are currently at 57 million. We expect to go to 100 million

within another time.

You have to understand that when you passed the Energy bill, you allowed us the ability to get the bankers to come forward. Without the bankers, we couldn't produce this. It was the Energy bill that made it possible for us to be able to get to this. There is 2.5 billion gallons of infrastructure under construction currently. We are just about 57 million of that.

We want to double that. We see the need to do that. We cannot go for offsite to get the pollutants. That is going to be a problem. I believe you have the power here, you sit in the most powerful seat in the legislation of the United States, and I believe you have the power to see to it that this clean fuel is more of a proper an-

swer to our clean air. Thank you.

Senator Voinovich. Thank you for that. I was going to say it would be interesting, I know there are about 38 or 40 of these plants that are being contemplated, and I don't know how many are in construction right now, but it would be interesting to see, based on our new maps, how many of them would be impacted.

Mr. Paul, you are the head of the Dayton Regional Air Pollution, you have six counties?

Mr. Paul. That is correct, Mr. Chairman.

Senator Voinovich. You come from an area right now, and I get the clips out of the Dayton Daily News, that has really been clobbered in terms of jobs. Your area of all the areas in the State with Adelphi and everything else has been just really hit.

Have you ever, are you allowed, in doing your job, to look at what impact some of these regulations are having on the six counties that are under your jurisdiction in terms of their being in nonattainment? As you know, when I first became Governor, we were nonattainment all over the State. I worked really hard on it, not only because I was interested in the environment, but I knew, in fact, I was told when I was campaigning, that unless something is done about this, we won't get businesses to expand and certainly they will just fly right over us.

So I would be interested in knowing, how do you reconcile some of this in terms of the local economy? You are certainly familiar with the urban poor and what they are up against today in terms of high natural gas costs. I would be interested in what you have

to say.

Mr. PAUL. Thank you, Mr. Chairman, and I am concerned. I have worked in the Dayton Regional Air Pollution Control Agency for 33 years. So I have been there when you were mayor of Cleveland, when you were Governor, and we have worked on these issues. We believe that, and obviously as a local agency we are strong in this, we believe that being a responsible agency and providing good permits is one of the solutions.

We are working right now on a permit for a 122 million gallon per year ethanol plant. We received the application last week. We have three people working on it. We will process that permit.

I will note that that is a permit that because of good technology is under 100 tons per year. So it could go into a nonattainment area or an attainment area and it would essentially be a minor new source permit.

So this is something that we can do. Technology is the key. If you

have good technology, you can put a source in anywhere.

Senator Voinovich. Ms. Heiskell, well, my time is up. Senator Isakson.

Senator ISAKSON. Thank you, Mr. Chairman. Thanks to all our panelists for coming.

Commissioner Heiskell, I have a question for you. Can you give me a specific example or examples of industries or business that have chosen not to come to Walker County because of nonattainment?

Ms. Heiskell. We did have an auto manufacturing plant that was looking strongly at Chattanooga, who has taken the old Volunteer Army ammunition plant, 1,200 acres, and turned it into a very fine industrial park that has an exit off the interstate. They decided not to come to Chattanooga after a long process and went to another area outside our region that was not in nonattainment. That cost a lot of jobs from my community, as well as Chattanooga.

Senator ISAKSON. Is it not true that the EPA, on their Web site, lists all the counties in the country that are in nonattainment, and that most site location companies that assist major American industries in locating sites go first to that site, rule out communities without ever coming to take a look at them?

Ms. HEISKELL. I am not sure they go first, but I do know that they do that, and it is there. It does certainly limit those people

who are in nonattainment, their counties.

Senator ISAKSON. Isn't it true that your community obtained at your own initiative and expense scientific studies and documentation that up to 60 percent of the particulate matter in Walker County was contributed by Alaska, Canada and Africa?

Ms. Heiskell. That is true.

Senator Isakson. Isn't it true that you are under the Bermuda High that traps, in the summer months, May to September, whatever is flowing over kind of gets trapped and stays there for 5 months?

Ms. Heiskell. That is also true.

Senator ISAKSON. You are not in charge of the weather, are you? Ms. Heiskell. No.

Senator Isakson. Isn't it also true that in your written testimony you state you suffer from asthma?

Ms. Heiskell. Yes, it is. I know a lot about asthma. I could an-

swer a lot of questions on that.

Senator Isakson. I commend you, I hope everybody will read the Commissioner's testimony. Because it is a testimony to the Clean Air Act. It is also a testimony to how reason and judgment has to be applied in the considerations for the effects of these regulations and how carefully EPA needs to look at the unintended consequences of establishing these new standards, which are solely within their judgment to establish.

Last, I want to ask the Commissioner one other question. Can you think of anything that you as the Commissioner could do or initiate to reduce particulate matter that you have not already

done in Walker County?

Ms. Heiskell. No, I can't. But our problem is compliance and enforcement and fines that are placed upon communities that have no control. So we just continue to have to pay more and more as we stay out of compliance.

Senator ISAKSON. So you are trapped, you don't have a way out, and you have done everything you can do within your control and

your responsibility to meet the standards?

Ms. Heiskell. We think that we have, except for old men that want to keep burning their yards.

Senator ISAKSON. Well, we old men are a problem everywhere.

[Laughter.]

Senator Isakson. Thank you, Commissioner, and thank you for being here today.

Ms. Heiskell. Thank you, Senator.

Senator ISAKSON. Thank you, Mr. Chairman.

Senator Voinovich. Mr. Paul, I am going to try and make this really brief. Dayton is in nonattainment now, is that right, the Dayton area?

Mr. Paul. That is correct, yes.

Senator Voinovich. All the counties or just Dayton, Montgomery County?

Mr. PAUL. Four of our six counties.

Senator Voinovich. OK. Are you familiar at all with any information from the economic development departments of the city of Dayton or from the counties of situations where they are trying to get businesses to expand or attract businesses where this nonattainment has been a problem?

Mr. PAUL. I am aware that it is a problem. I meet pretty regularly with the chamber of commerce and we discuss that. Primarily we discuss the advantage of coming into attainment. So we talk about the different strategies that are going to help us to come into attainment, and then how to maintain that attainment once we reach it.

Senator Voinovich. If the decision of the Environmental Protection Agency is to lower the standard, and by the way, the current standard that we have for particulate matter was reviewed by the OMB, and John Graham was over there in OIRA, who I have a great deal of respect for, and they concluded that based on the cost benefit and health benefits and so forth that this was sensible.

If we get a new standard, isn't that going to make it even more difficult for your region to get businesses to expand or be attracted to the area?

Mr. Paul. Yes, it could. We agree, your concerns are legitimate, and we agree that they need to be addressed. Where we think they should be addressed, though, is in the implementation. It is not the standard that forces the different requirements, but it is the imple-

Senator Voinovich. The problem is, it is the designation. That is the deal. They are designated, and I think that Senator Isakson made the point, when you have folks that do site selections, they get the information and they are advising people and they say, no, you don't want to go there, because your costs are going to probably be more there than if they would be somewhere else, because they are in a nonattainment area.

Mr. Paul. That is correct.

Senator Voinovich. How do you answer that?

Mr. PAUL. Well, I answer that by saying that we can't tell people that the air is healthy if it is not, and that the setting of the standards, if it is done with science, is to inform the public as to whether or not the air they breathe is healthy or not. What we do based on that is something that is another process.

If I could, Senator, I would suggest that that is where your efforts are better aimed, is at the process, once a standard is set. But we owe it to the public to be honest with them as to whether or

not the air they are breathing is healthy or not.

Senator Voinovich. That trumps the fact that some businesses

might not expand and might not be attracted to the area?

Mr. PAUL. No, what that does is that it says that if the standard should be set at 14, and that means we have a lot of nonattainment areas, and that means that there are going to be economic problems, then that is another topic that needs to be addressed and should be addressed and can be addressed by your committee.

Senator Voinovich. Well, I wish I could assure you that would be the case.

Mr. Paul. If you do, I would pledge to help you with that.

Senator Voinovich. I know this, that one of the things that we are going to have to look at, and one of the things that we did have in Clear Skies, was a provision that said that if a community was in substantial compliance and moving forward with making the goal, that for example, in 2010, that the sword of Damocles would not come down on their head.

But that is not the law today. So we have a lot of communities out there that know right now, Joe Koncelik, our EPA, he is fit to be tied. I am sure you are probably trying to help them on the SIP.

Mr. Paul. Absolutely.

Senator Voinovich. But he said, we can't do it. That is it. I have to be honest with the businesses, I have to be honest with the chamber of commerce people, we can't get it done. So again, this is going to be, it is hurting right now. I understand your position. But there has to be some balance here.

Senator Isakson.

Senator ISAKSON. Just a comment, Mr. Chairman, on what you said about Clear Skies. Clear Skies established aggressive goals for 70 percent reduction, SOx, NOx, mercury, but it had positive carrot rewards for people that were doing the right things and making progress. That is one of the points that I have been trying to make

and probably haven't made well enough.

When you have a community like Ms. Heiskell's that is doing everything they can do, everything within their control, and they are doing it for the right reasons, then to hit them over the head with a stick when instead you ought to get some carrots to reward the ones that are doing right just doesn't seem to be the right approach. I think that Clear Skies was a great step forward in accomplishing even greater reductions of particulate matter and other contributors to pollution while still encouraging people positively to get to those attainment levels. That is all I will say.

Senator Voinovich. Thank you. Any other questions?

Well, I would like to thank the panel for being here today. We will do the best we can. I would like to talk to you, Mr. Paul, about your ideas on how we can deal with this.

Mr. PAUL. Thank you, Senator. I look forward to that.

Senator VOINOVICH. Thank you.

Our next group of panelists, we have Mr. Harry Alford, who is president and CEO of the National Black Chamber of Commerce; Mr. Conrad Schneider, who is the advocacy director for the Clean Air Task Force, and Mr. Schneider, we are glad to see you back again.

Mr. SCHNEIDER. Thank you very much.

Senator VOINOVICH. Mr. Bill Christopher, who is the executive vice president of Alcoa. Mr. Christopher, I want to thank you very much for your willingness to sit through all of this, to get an idea of what we go through here, what we do.

Mr. Christopher. My pleasure.

Senator VOINOVICH. And the fact that we have such a distinguished corporate citizen from the greater Cleveland area here to testify on this is very much appreciated. Thank you.

Mr. Alford, we will start with your testimony, sir.

STATEMENT OF HARRY C. ALFORD, PRESIDENT AND CEO, NATIONAL BLACK CHAMBER OF COMMERCE

Mr. ALFORD. Mr. Chairman, I am president and CEO of the National Black Chamber of Commerce. The NBCC appreciates the opportunity to offer its views on the Environmental Protection Agency's proposed rule to establish a more stringent National Ambient Air Quality Standard NAAQS for particulate matter

Air Quality Standard, NAAQS, for particulate matter.

I will summarize the NBCC's formal statement provided for the record and attempt to respond to any questions you or other members of the subcommittee may have. Mr. Chairman, the NBCC has 190 affiliated chapters in the United States, as well as inter-

national affiliate chapters and businesses, as well as individuals who may choose to be direct members with the national office.

The 1.4 million African American businesses in the United States represent sales of more than \$180 billion annually and maintain an annual spending base of over \$800 billion. The NBCC represents 100,000 Black-owned businesses and provides education and advocacy that reaches all 1.4 million Black-owned businesses

across the Nation.

The NBCC has historically supported the efforts of the EPA to protect the public health of all Americans. The Clean Air Act and its regulatory structure, while controversial over the years, has been the principal driving force behind the improvements in our Nation's air quality and the reduction of harmful air pollutants. The NBCC also understands that despite this progress, much work remains to be done to achieve our Nation's air quality goals.

In that spirit, the NBCC continues to support EPA's effort to control sources of pollution and the promulgation of regulations that are both cost-effective and based on sound science. As a regulated community, we cannot tolerate regulation for the sake of regulation and the attendant economic costs of such policies. The regulate and punish mentality must be abandoned, so that we may address our environmental challenges while sustaining a strong economy

In that regard, the NBCC is concerned that the current EPA proposed rule to further establish new NAAQS for urban particulate matter and to establish a more stringent PM_{2.5} standard is not supported by current science, and if adopted, could have an adverse

impact on NBCC members and affiliates.

Mr. Chairman, small and medium businesses alike are today facing a number of challenges, not the least of which are higher interest rates and higher energy and related operating costs that are eroding margins and placing pressure on maintaining current employment levels. The imposition of new regulations on industry, manufacturing and other sectors, in the absence of scientific evidence of a demonstrable health benefit, is simply not justified. The NBCC is concerned that these new standards would likely result in further increased energy prices, especially that of natural gas, a key energy input in urban areas.

Beyond this, given the lack of scientific justification, the NBCC is concerned about the impact of the proposed rule as a result of the expanded number of nonattainment designations under the Clean Air Act. These stricter permitting requirements for companies that add new units or make major modifications to their facility make them competitively disadvantaged, as such requirements do not apply to similar facilities operating in attainment areas. Again, these restrictions would significantly impact urban areas.

Also, nonattainment areas face the risk of losing Federal highway funding that is vitally important to urban redevelopment. In addition, companies that build a new facility or that perform a major modification to certain existing facilities in or near a nonattainment area would be required to install the most effective emission reduction technology without consideration of cost.

Moreover, new emissions in the area must be offset. Thus, if there is no party willing to revise the offset, then the project resulting in increased emissions of a given pollutant cannot go forward.

Take the Mercedes plant in Alabama, for instance. Our Birmingham chapter was excited that the original plan was to put the plant inside Birmingham city limits. Gas stations, restaurants, hotels, et cetera, would have benefited significantly. Due to attainment levels, the plant was moved 90 miles to the south, in rural Alabama. It devastated the expectations and growth opportunities of the largest city in Alabama.

The same scenario happened in Indiana with the Isuzu plant that was destined for Indianapolis, but ended up 70 miles north in Lafayette. We have about 250 members in the Indianapolis chapter and 2 in Lafayette. The impact was obvious. Those are but two ex-

amples.

Sir, we try to educate our elected officials on why there is unemployment. It is amazing in urban areas unemployment is so high. We try to explain the reasons for that. One of the reasons is bad and ill-thought regulation.

Thank you.

Senator Voinovich. Thank you for your testimony.

Mr. Schneider.

STATEMENT OF CONRAD SCHNEIDER, ADVOCACY DIRECTOR, CLEAN AIR TASK FORCE

Mr. Schneider. Thank you, Mr. Chairman and other distinguished members of the subcommittee.

My name is Conrad Schneider. I am the advocacy director of the Clean Air Task Force. We are a non-profit organization dedicated to restoring clean air and healthy environments through scientific research, public education and legal advocacy. I would like to introduce Blake Early, who is going to help me by flipping the charts up here, from the American Lung Association. I would like the record to reflect that Mr. Early has been a champion of clean air for many, many years.

Let me begin, Mr. Chairman, by wishing you a happy birthday, which if I am not mistaken is coming up this weekend.

Senator VOINOVICH. Thank you.

Mr. Schneider. Some of my colleagues in the environmental movement were a little sorry that this hearing was scheduled. I take a slightly different view. I think we need more attention to the issue of particulate matter, so I welcome this opportunity.

Further reductions in fine particles are a matter of life and death for tens of thousands of Americans. From the perspective of human health, particulate matter is the most important pollutant that is regulated by EPA, period. EPA's leading air benefits consulting firm estimates that fine particles from powerplants and from diesel engines together lead to the premature deaths of nearly 45,000 Americans each year.

In Ohio alone, diesel and powerplant pollution is responsible for the premature deaths of approximately 2,500 people each year. In polluted cities, such as the cities that are in residual nonattainment, the mortality risk of breathing the air is comparable to the

risk of living with a smoker.

The proposed revisions, while an improvement over the current standards, do not go far enough in protecting human health. EPA should tighten the proposed standards to protect public health with an adequate margin of safety by tightening both the annual and the daily standard and setting a coarse particle standard. As a conservative estimate, tightening these standards could save as many as 10,000 additional lives each year. Certainly, EPA cannot justify adopting standards any less than those recommended by its own Clean Air Science Advisory Committee.

Now, while issues of cost and implementation are and should be outside the scope of EPA's review, this subcommittee should note that the current and proposed standards are achievable, cost-benefit justified and can be met with affordable, available technology that will not damage America's economic vitality or the economic health of the sectors that will be called upon to shoulder the load.

Although the Task Force believes it would be inappropriate to use cost benefit tests to determine the NAAQS standard, it should give the subcommittee some confidence to know that steep reductions in fine particles are overwhelmingly cost-benefit justified. The Regulatory Impact Analysis of the CAIR rule, of the new diesel rules and of EPA's analysis of Senator Carper's bill, the Clean Air Planning Act, found that the benefits in every case outweighed cost

by 10 to 1. That is \$10 of benefit for every \$1 of cost spent.

Now, for these new standards, the proposed standards, for better or for worse, the regulatory impact of these standards will be far in the future. The way the system works, we are talking about a standard that won't be achieved until 2020 or later. It is certainly premature today to conclude that the proposed new standards will be impossible to achieve. However, EPA and the States do need a renewed focus on making that happen. This is happening in Cleveland, as you know, in Columbus, through the MORPC process there, and in Dayton, as we heard.

We do know enough today to know that a cost-effective program for attaining these standards would include (a) setting a tighter national or regional cap on powerplant sulfur dioxide emissions; (b) States requiring sulfur dioxide emissions on powerplants that have a significant impact on nearby nonattainment areas; (c) EPA completing the process of tightening standards for new locomotive and diesel engines and marine vessels; and also requiring on-road diesel engines to meet tighter emission standards when they are rebuilt; (d) States and local governments requiring additional PM_{2.5} reductions from private and public diesel fleets.

You and Senator Carper, in your actions on the Diesel Emission Reduction Act and the Clean Air Planning Act are taking exactly the right approach, focused on the power industry and America's diesel fleets as the largest contributors to the problem, and potentially the largest contributors to the solution. EPA, though its CAIR rule, took an important step, but as you noted, it will be too little too late for some of these areas that are trying to meet their

attainment obligations on time.

If we could see the next three slides, the first one shows the current nonattainment designations for under the current standard. The next one shows how that map would change and the improvement under the CAIR rule in 2010, we lose much of the red. By 2015, the CAIR rule helps even more. The areas start to diminish.

But let me go to the next slide, the very next slide, which is a 2 million ton sulfur dioxide cap, such as has been proposed by Sen-

ator Carper in the Clean Air Planning Act. This is the tightest standard that has been proposed, much tighter than the CAIR rule and tighter than "Clear Skies". You can see, we have almost got the red out.

Unfortunately, EPA in its CAIR rule has tied the hands of the States in making additional powerplant reductions beyond CAIR more difficult than is necessary. This special treatment afforded the power sector is forcing States to turn to more expensive sources such as small business for reductions.

EPA is working on its RIA for the new standards right now, and look at what it says for Ohio. If you look at the bars on the far left, and there is a handout at each of your places at the dais there that shows this, if you can't see the poster. On the far left of each of these things, it is for Cuyahoga County and Summit County, OH, the light blue bar shows what the benefits would be from additional reductions beyond CAIR. The light blue bar in each case says that powerplants should be the target of the next set of reductions beyond CAIR, because they are the most effective.

Do you know what the other bars are? Diesels. Powerplants and diesels are the critical path steps that we need to take to achieve the standards. The same is true with respect to two other counties in Ohio, like Butler and Hamilton. Same story. Powerplant sulfur dioxide is the next lowest hanging fruit. We need to take the second bite at that apple to make achieving the standards a reality.

Let me go to the last slide very quickly. These slides show that diesels in Atlanta, Chicago and New York are the biggest local contributors, and therefore the biggest part of the solution that we could have in those areas that have a sort of residual or persistent nonattainment.

Then the last slide here shows that what happens in Ohio stays in Ohio. Although much has been made about interstate transport of pollution from Ohio powerplants to the northeast, the biggest adverse impact from Ohio plants is felt right in Ohio. That is where the biggest part of the solution will come, too. Ohio will experience the greatest benefits from additional reductions in Ohio powerplants.

In closing, let me just say that Congress should leave alone the existing statutory and regulatory process for setting these standards. The current standard setting process provides an excellent example of what we all should want: namely, science-driven policy. Instead of unnecessarily complicating this process, for example, by introducing the false objectivity of a cost-benefit analysis, EPA should be urged to respect the deadlines in the Clean Air Act. If it takes any action at all, Congress should fully fund and restore the States' air grant program, because the people on the front lines of making these standards a reality will be the State air officials whose budget is proposed to be cut by \$35 million.

Thank you, and I would be happy to answer any questions you may have.

Senator Isakson [presiding]. Thank you, Mr. Schneider.

Mr. Christopher, you are recognized. Mr. Schneider took a little bit of extra time, so you need to take a little bit of extra time to get your worth, that is fine.

STATEMENT OF WILLIAM F. CHRISTOPHER, EXECUTIVE VICE PRESIDENT AND GROUP PRESIDENT, AEROSPACE, AUTO-MOTIVE AND COMMERCIAL TRANSPORTATION, ALCOA

Mr. Christopher. Mr. Chairman, members of the subcommittee, thank you for the opportunity to be before you today.

My name is Bill Christopher. I am the group president for Aerospace, Automotive and Commercial Transportation for Alcoa. I also

serve as an executive vice president for the company.

We have over 131,000 employees in 43 countries. We are the world's leading supplier of alumina, aluminum and a lot of transportation and industrial products around the world. We at Alcoa hold sustainability as a core value in our business and in everything we do. We have hard goals and metrics for sustainability as key elements of our 2020 vision for the company. In 2005, we were honored to be named as one of the world's three most sustainable corporations by the World Economic Forum.

I also serve on the board of directors for the Greater Cleveland Partnership, or GCP, and I appear before you today on their behalf. GCP is one of the largest metropolitan chambers of commerce in the country, representing more than 16,000 small-, mid-size and large companies in the region. Because of our commitment to the environment and concern for the region's economy, GCP has asked me to provide leadership in the efforts to shape the business com-

munity's involvement in clean air compliance discussions.

My message today will focus on the economic impact of imposing standards that are difficult if not impossible to attain in the short

term. I would like to make four key points.

First and foremost, I am not here to debate the value of vigorous efforts to achieve cleaner air. There is absolutely no doubt that cleaner air is central to the future health of our residents and overall quality of life. Both my company and the Cleveland business community have demonstrated their commitment to continuous improvement in the region's air quality.

We are currently working with the Northeast Ohio Areawide Coordinating Agency, or NOACA, in the development of the Ohio State implementation plan for ozone compliance. We will also be actively engaged in the fine particulate process. We are reaching out to more than 60 local manufacturing companies to educate them about the situation and ask for their assistance in developing innovative and progressive solutions to the problems.

However, since an estimated 60 percent of Northeast Ohio's pollutants come from outside the region, neither our sincere or aggressive efforts or regulatory action imposed on the region will bring

us into compliance by 2010.

Second, and equally important, our efforts to achieve cleaner air must be a delicate balance. They must take into account the potentially significant economic costs of places like Cleveland that are in the midst of a very painful economic transition. Third, achieving the balance is complicated, because the time lines for meeting the Clean Air Act standards are mis-aligned with the time lines for several Federal standards established to regulate specific industries. The gaps created by these misalignments add economic costs to compliance that could be devastating in places like Cleveland

that rely on manufacturing today as a key element of their economy

We are currently reviewing studies that indicate the cost of compliance in the Cleveland region could be as much as \$919 million a year in order to meet the requirements by 2010. In contrast, the estimate is \$12 million a year if we allow the benefits of industry

regulations to take effect by 2015.

This misalignment could cost Northeast Ohio 12,000 jobs, could result in a \$1.1 billion reduction in disposable personal income and a \$1.4 billion reduction in gross regional product, a prospect the region can ill afford. The decline in related tax revenues would hamper the ability of the region's public sector to support initiatives that help with the transition of the economy from one based on heavy manufacturing to a knowledge and service based economy.

The stigma of a sustained designation as a noncompliance region will have impact on future residential and economic growth in spite of our significant improvements in the air quality in the region. This chronic condition will create an environment of uncertainty, significant costs that will accelerate the flight of private capital from the region and more than likely outside the country. Companies looking to locate facilities or expand capacity will not even consider communities in nonattainment, we have heard that from others.

Finally, before any new regulations are adopted, regions like Cleveland should be given adequate time to understand the costs of proposed standards and develop strategies that reflect the needed economic balance. New modeling capabilities perhaps developed and tested in Northeast Ohio with the assistance of the Federal Government can help in this critical task.

Compliance with a more stringent fine particulate standard in the face of standards misalignment and indeterminate science, before we have even had the opportunity to adequately address the challenges of the current SIP process, may be physically impossible, if not economically devastating to the Cleveland region. I again want to close and finally emphasize, achieving cleaner air is

a goal we all actively support and we must achieve.

However, we would like to urge the Federal Government to move forward with caution. We ask that you provide regions like Cleveland with adequate time and resources to find a balanced approach that allows us to address these increasingly complex air quality challenges in a way that minimizes the impact to our economy. Incremental responses to air quality compliance with time lines that are not in synch with national time lines on other industry regulations are likely to create huge costs in the short term and leave our region in a state of noncompliance for years to come.

We respectfully ask your EPA Administrator to defer action on the 24-hour fine particulate matter standard at this time, and to assist Northeast Ohio with evaluating the impact of meeting cur-

rent standards. Thank you.

Senator ISAKSON. Thank you, Mr. Christopher. Chairman Voinovich will return in a minute. I will take the first round of questions then go to Senator Lautenberg.

If the gentleman from the Lung Association would put back up that chart that had the purple bars that showed Ohio and the contributing States, I wanted to ask a question. I believe it was the last one.

Mr. Schneider, I appreciate your testimony and I want to make sure I heard right what you said on this chart. You said that this demonstrated that Ohio was the major contributor to its own problems.

Mr. Schneider. That is right.

Senator ISAKSON. Isn't it true, though, and this is not adversarial, sometimes people preface something with that, so everybody says, here it comes, isn't it true though, if you took all the other States that do contribute to Ohio, which are Minnesota, Indiana, Pennsylvania, even the great State of Georgia, where I am from, and put them in one bar, they would exceed the contribution of Ohio?

Mr. Schneider. I don't know that for sure. That certainly could be the case. There is a problem with interstate transport, there is no question about that, Senator.

Senator ISAKSON. Well, wait a minute. You don't know what the question is yet.

[Laughter.]

Senator ISAKSON. I have added it up, and that statement was correct. Outside States contribute more than the State that is affected.

Now, here is the hypothetical question. I go back to my county commissioner from Georgia, from Walker County, Ms. Heiskell. Assuming that Ohio had done everything within its capacity to reduce its contribution as a State.

Mr. Schneider. I am looking forward to that day, sir.

[Laughter.]

Senator ISAKSON. Well I said if. I didn't say that it had. If it had and yet it still was in nonattainment because of the contributions from States who had not done everything they could, or industries that hadn't, is it still fair for them to be punished because of that fact?

Mr. Schneider. That is not such a hypothetical question for me, Senator, because I live in the State of Maine. Maine is at the end of the tail pipe for everybody, the Midwest and Northeast combined.

Senator ISAKSON. Would it be fair to Maine?

Mr. Schneider. This is what I am getting to. The Clean Air Act has provisions that allow some recognition of what you are talking about. Rarely do we see a situation, when you really drill down and look at it, that a State has done everything that is reasonable to do.

Senator Isakson. I said it was hypothetical.

Mr. Schneider. I understand. But I am quarreling a bit with your premise, because it hasn't been my experience that States that tend to point their fingers to other States rarely have clean hands to do so.

Senator ISAKSON. Well, this is not hypothetical. If Walker County, GA and Commissioner Heiskell had done everything they could do within their control, everything they could do within their control including in zoning and land use and everything else, and yet because of contributions of pollution from other areas and other

States and other continents, in their case, they are still in nonattainment, should they be denied highway funds to improve their roads?

Mr. Schneider. Well, what the State of Maine did—

Senator Isakson. I asked about mine.

Mr. Schneider. It is the same answer. Because I think it provides a good model for what may be an appropriate type of relief

for what you are talking about.

What our State did was they filed a petition under section 126 of the Clean Air Act, saying that their problem was being caused by interstate pollution, and they called on the U.S. EPA to reduce that pollution to such an extent that they would no longer be there. They were saying, in effect, you upwind State are causing my problem, I am calling on the EPA to solve that problem. They don't sit back and just say, I am sorry, our hands are tied, we can't do anything about it.

Senator Isakson. Who doesn't say that?

Mr. Schneider. That is what I am saying the State of Maine did not do, and complain about it. They did something about it. They used the provision of the Clean Air Act to put the ball back in EPA's court and required that they—

Senator ISAKSON. So now you would agree that if they weren't the main contributor and other people were, that they shouldn't automatically suffer from reduction of access to highway funds? That was the question.

Mr. Schneider. That was the major reason that Governor King in Maine filed a 126 petition, was because he was demonstrating that

Senator ISAKSON. What was the result of the 126 petition?

Mr. Schneider. It was granted. It resulted in the NOx SIP Call which cut pollution from powerplants in the East. Maine is now in the process of being designated in attainment.

Senator ISAKSON. OK, I am using all of my time. Wait 1 minute. So the answer is yes, and you do think that if a community is doing everything it can do to meet standards and still is punished or in nonattainment, there should be a method for them to come out from under the punishment?

Mr. Schneider. In the wisdom of the legislation, the Clean Air

Act, there is a mechanism, and it has worked before.

Senator ISAKSON. In fairness to Commissioner Heiskell, because your assumption is that we are complaining and hadn't done everything we could do to appeal to EPA, that is in fact not the case, they have gone to immeasurable lengths and cost to get the scientific data to demonstrate exactly that case, and the EPA has been rigid. We might ought to hire you to go make the argument and that is another question.

Senator Lautenberg, I am going to take one additional second, if you don't mind because I wanted to commend Mr. Alford.

Senator LAUTENBERG. I don't mind at all.

Senator ISAKSON. Everybody's testimony was great, but that is about as succinct a statement as I have heard on this entire issue. In fact, I saw this morning on television former Vice President Gore in an excerpt from a speech he made, I believe to Wal-Mart in Bentonville, AR yesterday, where he was applauded for the

statement that you, Mr. Christopher, actually made in your testimony, which was that there is a delicate balance between business and the environment, and collectively working together, we can

solve our problems.

Mr. Alford in his testimony and you in yours took that approach, not that it is us versus them. But in fact together, in a cooperative spirit, can move the country forward. This again is a statement and not a question. I hope everybody will read the statements of everyone, but I commend the statement of Mr. Alford to you, because it succinctly said that we don't need to avoid doing anything to improve our environment, but we must avoid destroying what allows us to do that, which is the vitality of our country, our business and our economy, all for the sake of the symbolism of having done that.

That is the reason I asked you the question that I asked you, Mr. Schneider. But I commend you on your comment and I appreciate your quantifying the cost under the potential standard that is being proposed now, Mr. Christopher.

Mr. CHRISTOPHER. Thank you, Senator.

Senator Isakson. With that, I apologize for going over. But Mr. Schneider's answer was long.

Senator Lautenberg.

Senator Lautenberg. Not at all, I thought the questions were

Senator ISAKSON. OK, fair enough.

[Laughter.]

Senator Lautenberg. In any event, we are not pressed with the smallest minute here. Mr. Chairman, to Chairman Voinovich, are you pressed for time? Because if you are, I will be happy to defer.

Senator VOINOVICH [presiding]. No, go ahead.

Senator Lautenberg. Thank you. Frankly, Mr. Alford, I am interested in what you say, but surprised. Because when I see what happens in the minority community in so many cases, and environment is a favorite subject of mine, even though my background had little to do with environment, except wishing for good things. I was a fairly successful leader of establishing a business, businesses in Cleveland, ADP, I think must be a member of the chamber there. I know it is a significant factor.

Because too often, the areas, I grew up in the city of Patterson, NJ, it was largely a minority city.

Mr. Alford. I am familiar with it, yes, sir.

Senator LAUTENBERG. I lived there as a child. Typically, what happens is those areas are the ones, the urban areas, the minority areas are the ones where they put the incinerator plants and the

Superfund sites.

As a consequence, I think it does have some health significance to the individuals who live in those areas. While I respect the fact that minority businesses are often disadvantaged by all kinds of things, but I would have thought that you might be aware of a report by the CASAC. It is a group of scientists that go without challenge, created by the Clean Air Act. They are supposed to be scientists and not politicians. They see all kinds of problems as a result from the particulate material matter standard. They say that the Agency, EPA, has chosen to propose going outside the range of the CASAC. This science group, recommended levels, to retain the annual standard level at its current level.

They say the Agency's risk assessment indicating reduced health risks at annual PM_{2.5} levels below the current standard was a key component in their recommendations. They talk about the dangers to health and so forth, and are fairly harsh, have come back a second time to reaffirm that. So the scientific authentication here I think is fairly well established. One can agree with it and say, look, the devil with the science. We don't care what they say. We have

business and we have jobs and that is all.

But I think ultimately, if the average citizen was given a choice between some job change and saving lives, especially in my family, in your family, all of you, I think that they would say, hey, listen, let's get on with this job. Mr. Christopher, I am interested, your company is quite a company and I marvel at the ability they have had to stay in business with all kinds of competition in the field. But the fact of the matter is, it doesn't seem to me like there is a rush. I might quarrel a little bit with your recitation of the time table. However, the timing of these regulations, such that major impacts will occur in years 2010 to 2015 timeframe, as a result complies with current Clean Air standards by 2010, and will require incremental actions.

But if we look, the effective date of designation, there is no action except to do some planning, that is April 2010, the reports are due 2013. The attainment date is 2015, and the attainment date with an extension which can be received is 2020. Doesn't that look like there is enough time to make adjustments? We make adjustments to all kinds of things. There are products that are no longer manufactured, asbestos, for instance, and tobacco, as we have discussed, is considerably diminished, because we see that there is a harm as-

sociated with those products.

Well, there is a harm associated with these emissions. I am sorry the Chairman wasn't here, because he would have seen Ohio in prominent position there as being the largest contributor to particulate matter among a whole bunch of States. It was defended by the fact that there are States west of you who throw their particulate matter at Ohio.

But if we have a national standard, and I will get back to you, Mr. Christopher, if we have a national standard, isn't it going to reduce the assault on the air of Maine and New Jersey and other places, because everybody will start contributing? I think there could be some exception made, Mr. Schneider pointed that out, on appeal. Because even if you did not operate any of your businesses, you would still be in nonattainment in Maine.

Mr. Christopher, is there not any reasonableness to this time table to make the shifts? I mean, you agree in your early comments that this is something that you would like, that you are concerned

about, the company, public health.

Mr. Christopher. Senator, no, actually, we do agree. We don't debate what needs to be done or whether it needs to be done. It gets to be a debate of pace. The numbers I referenced talk about the current misalignment between industry regulations and meeting the 2010 standards. So if we extend that to 2015, the point that we are making is, we have to look at this in aggregate, that diesel

emission regulations, which in fact will be fully implemented on diesels in 2010, will take 5 to 7 years before the fleet is replaced and full benefit is there.

When we get down to trying to deal with the gap between when these regulations will have a significant impact on especially NOx emissions and when we have to hit Clean Air standards that are required by the EPA, the cost of implementing in that transition is very, very high. Our point is, moving forward, unless these get aligned, so that yes, in fact, regulating emissions on coal-fired powerplants has been done in part of the country, it hasn't been done in the rest, in the absence of doing that, we won't be able in the regions to attack locally generated sources to the point where we will be able to close these gaps. We will be in nonattainment.

To be realistic, \$900 million won't be spent, because businesses and industry will look at that and go, this is not a viable economic solution. You will be more than likely to see the jobs flight. That is the point we are making. It is not a debate of whether it needs to be done. It is aligning the Federal regulations with the Clean

Air Act and the pace at which we can do this.

Senator Lautenberg. Has Alcoa moved jobs from the United States to other places?

Mr. Christopher. For environmental reasons, no.

Senator Lautenberg. For business reasons?

Mr. Christopher. For business reasons, we have, yes.

Senator Lautenberg. Well, I think there are options available in the event of-

Senator Voinovich. The Senator is at 9 minutes.

Senator Lautenberg. OK, I just wanted to show you this if you hadn't seen it.

Senator Voinovich. Thank you.

Senator LAUTENBERG. By the way, not pointing an accusatory

finger, I promise you.

Senator Voinovich. I understand. I have more powerplants than probably any State in the Nation. That is one of the reasons why we wanted to get Clear Skies passed.

Mr. Schneider. Senator, and the point of that graph that you were just shown, which is my graph, was only to say that for many years, Ohio has been blamed by the Northeast for all of its problems. You are more than well aware of that.

My point was to say that what happens in Ohio stays in Ohio, that the biggest contributor to Ohio's own problem is Ohio powerplants. That is the point. Cleaning them up, and I was suggesting in my testimony that we need to go further than CAIR to do that, because going further to CAIR is still cost-effective reductions, rather than shifting the burden on to small businesses and industries. If you do that in Ohio, you will see the biggest benefits both in health but also for your nonattainment problem.

Senator Voinovich. I am familiar with that. Just for the record, Senator Lautenberg, when I was Governor we were in compliance.

But we sure got shot a lot.

[Laughter.]

Senator Voinovich. Your solution to the problem, the 126 petitions, we have an environmental policy by lawsuit. We need some certainty. It is a big, big problem.

Mr. Alford, I agree with Senator Isakson. Your testimony was right on.

Mr. ALFORD. Thank you.

Senator Voinovich. I can't help but think back when I was mayor, where we were working very, very hard to do economic development in the city of Cleveland, to provide jobs for those people who are unemployed and having all kinds of problems with the Environmental Protection Agency. I suggested one day, why don't the two of you get together and talk. On one hand, we are trying to create jobs, on the other, we are trying to make it more difficult to create jobs.

I also just thought about the Brownfields legislation that we are all excited about. It would be interesting to see, I see Mr. Paul nodding your head, we are trying to do something in Dayton right now. But if you are not in attainment, new rules come in, the fact that somebody is going to develop a Brownfield site may be less likely than it would ordinarily. So it is just somehow bringing some sense

to all of this.

Mr. Christopher, you compete internationally. Has your company ever looked at your costs versus, and you said in your testimony, no, we haven't moved because of the environment, but have you, in your consideration about where you are going and what you are going to do, for example, in the Cleveland area, what impact will this have on your decisionmaking about your future expansions or

perhaps locations?

Today, China has no environmental regulations. They are talking about it. But they lose, 450,000 people a year die from pollution. Their pollution now is, 20 percent of the mercury in the Great Lakes, according to our best information, is from China. Their pollution is starting to reach the West Coast of the United States. This calls for a global discussion on this, and I am glad the President has now instigated this in that area of the world, I think five or six countries.

Comment on that in terms of your competitive position in the global marketplace and what impact this has. I know for sure in the chemical industry that we have lost jobs, absolutely, because of the high cost of natural gas. One of the reasons why we have high cost of natural gas is that we encouraged people to use natural gas to generate electricity because it is cleaner. At the same time, and I know I could probably debate Mr. Schneider about this, at the same time we were shutting down the supply of natural gas. So obviously the price is going to go up.

Mr. Christopher. For us, when we make considerations, for example, in Cleveland. We have a facility that has been there now for 75 years. It still is one of the finest wheel facilities in the world. It is incredibly competitive.

Senator VOINOVICH. I have been there, it is terrific.

Mr. Christopher. We have aggressively reduced not only our emissions, but what we even operate against our permits. It has allowed us to expand, we have done the offsets.

The problem we faced moving forward in a nonattainment area is that we are getting to a point where being able to get offsets to continue to expand and modernize the facility will start to impact its competitiveness. Those are the concerns that we have. When we look at relocating in a region, and we do a lot of defense business that will stay inside the United States, we won't look at a non-attainment region, because we can't predict our ability to expand the operations if it is successful. Those are the kinds of things that start to influence us.

I think on the one hand, our Cleveland plant is absolutely evidence of being able to be an environmentally very responsible citizen, set a leading standard and be very, very good for business. We have shared those experiences with other people in Northeast Ohio. On the other hand, we are starting to get to the point where our options are becoming limited.

Senator Voinovich. Part of your problem, as you mentioned, is the uncertainty of the situation.

Mr. Christopher. Absolutely.

Senator Voinovich. Would you like to comment on New Source Review?

Mr. Christopher. I would prefer not to.

[Laughter.]

Senator VOINOVICH. That is still up in the air, in more ways than one.

So the bottom line is, all of this, because of the way it is going, you are going to take that into consideration in terms of decision-making.

Mr. Christopher. Well, it has an impact on how you think about investing in the facility that you have, and maintaining the jobs that we have there. It does.

Senator VOINOVICH. Right.

Mr. Alford, would you like to make any further comment? One I thought of is that we never get into, we talk about the asthma and the particulate matter and the impact on health, and I am going to be doing a lot more work in that area, just to satisfy my curiosity, but we don't talk about the fact that if I don't have a job, and I can't afford health care—

Mr. Alford. Yes, I would like to put in the record, I wanted to respond to Senator Lautenberg, the biggest health risk to African Americans anywhere, including New Jersey, is poverty. That is the biggest risk. The lack of funds for adequate health care, and a good

paycheck overrides that.

I had a very textbook example in Camden, NJ, when many people came and wanted to stop a cement plant from going in to Camden, NJ, LeFarge. I went to the black church, the NAACPs and showed them how many jobs the cement plant was going to impact Camden, and the quality of life, health care, education, safety, all that would be positively affected. And 85 percent of that community overwhelmingly received that cement plant. I am glad to say it is doing well.

Senator Voinovich. I know when we built the Chrysler plant in Toledo, we did it in the city. A lot wanted to go to the Greenfields, and the environmental concerns were one of the concerns that were folded in.

But one of the things was, you move jobs out into the Greenfields, as noted in some other testimony, it is very, very difficult for people to take advantage of that.

Mr. ALFORD. Members of our Toledo Black Chamber of Commerce, Northwest Ohio Black Chamber of Commerce, did about 30 percent of the construction of that plant, sir. It was very positive.

Senator VOINOVICH. Do any of you have any other comments you would like to make?

Mr. Schneider. Two, briefly, Senator. One is just a note with respect to Senator DeMint's comment about, how can it be that air pollution is getting better and asthma is getting worse and therefore there is no causation. That kind of misconceives the issue, a lot of people talk about that.

The issue is, if you have an explosion in asthma, which we have, and we know that air pollution is a trigger for that, it is creating more people who are susceptible. So it is not that the air pollution is causing the asthma explosion, it is that when you have all those people that have asthma for a variety of different reasons, because it is a multi-factorial disease, a complicated disease, we have more people who could be negatively impacted by the air pollution that

exists, even as it is getting better.

Senator Voinovich. How do you answer the question about the job loss and people who can't afford health care? I know for example one chemical company came to me and said, 3 years ago, you have to do something about natural gas costs or we are going to be moving jobs out of the United States, and they went from, I think 22,000 jobs, they are now at 14,000. They said, if you keep

going, we will be down to 10,000, 6,000, 0.

Mr. Schneider. Senator, I am puzzled by your comment on that, because I know that you had a hearing on the impact of the Clean Air Act on natural gas prices. My recollection from that hearing was that every single witness, whether it was a majority witness, minority witness, EPA, DOE, private companies, all came in and said that there is not a relationship between the restrictions or the requirements of the Clean Air Act and gas prices going up. That just is a false linkage.

Senator Voinovich. Well, the fact of the matter is—

Mr. Schneider. That is not what they said.

Senator Voinovich. Regulations shoved them into generating electricity through natural gas, because it was the easiest to get a permit, and it was the easiest for them to comply with the environmental regulations. At the same time that happened, environmental policies made it more difficult for us to get natural gas. We are in that boat right now.

I will tell you something, just as a final comment. I think that this country is in real trouble today. We have never had more competition than we have today, worldwide. Unless we develop the infrastructure of competitiveness and start looking at things differently, and that gets into health care, that gets into energy, it gets into dealing with the budget situation that we have, there is a lot of things out there, the infrastructure needs that we have in the country.

But one of them has to do with the environmental area. Unless we can get together, and I talk about the second declaration of independence, that is moving away from foreign sources of energy, for our national security and for our competitiveness. But it is not going to happen unless we get more things like we are doing with

the DERA legislation. But there has to be some coming together and putting each other's shoes on and figuring this thing out. Not only looking at it from the point of view of just our country, but to look at it in point of view of where does this all fit globally.

I will tell you, we cannot keep going the way we are. I know you don't agree with me, Mr. Schneider, but my problem is that I don't think, in so many of the decisions that we have made over the years, that we have taken into consideration the issue of the impact of environmental on our energy and our economy. It is something that unless we work it out, I think we are going to continue to see maybe a better environmental situation, but I think underneath, in terms of jobs and some of the other things that are so important to Americans.

So there has to be some compromise here. We really haven't been able to do that. This is my eighth year on this committee.

Thank you very much.

[Whereupon, at 12:30 p.m., the subcommittee was adjourned.] [Additional statements submitted for the record follow.]

STATEMENT OF HON. JOSEPH I. LIEBERMAN, U.S. SENATOR FROM THE STATE OF CONNECTICUT

Thank you, Mr. Chairman. Each and every year, 45,000 Americans die on average 14 years earlier than we'd normally expect because they are forced to inhale harmful amounts of particulate matter, or PM—a lethal combination of extremely small particles and liquid droplets made up of acids, organic chemicals, metals, and soil or dust particles—emitted by powerplants, diesel engines, and other sources.

In Connecticut, PM causes more than 400 premature deaths, nearly 800 non-fatal heart attacks, and more than 9,000 asthma attacks each year. There are three things I believe Americans rightly expect the Federal Government to do to combat this threat to public health. Unfortunately, we are failing at every step. First, the Federal Government's most fundamental responsibility is to tell Americans truthfully whether the concentrations of PM in the air they breathe are at levels that endanger their health. Unfortunately, the Environmental Protection Agency has proposed instead to hide the truth.

EPA has proposed to set national ambient air quality standards for particulate matter above the limits that the scientists, doctors, and public servants on the Congressionally-chartered Clean Air Science Advisory Committee have identified as necessary to protect public health. Not surprisingly, the political officials are unable to identify any scientific basis whatsoever for disregarding the results of the expert panel's exhaustive work.

On top of that, in determining whether the concentration of particulate matter in an area exceeds national standards, EPA has proposed ignoring dust from mining operations and farm fields. It is, however, the size of a particle, not its origin, that determines the harmful effect on lungs. Particles from mines and farms are the same deadly size as ones emitted by powerplants and diesel engines.

And, bizarrely, EPA has proposed exempting areas containing fewer than 100,000 people from the requirement to monitor concentrations of coarse particulate matter. Apparently, EPA's top officials do not believe that rural Americans have the same right as urban ones to know whether the air they breathe contains harmful levels of pollution.

My first request, then, is for EPA to abandon its plans to conceal from Americans the true extent of their current exposure to harmful levels of particulate matter. Specifically, I ask that EPA's final particulate standards adopt the limits that the Clean Air Science Advisory Committee recommended, omit the exemptions for mining and agricultural dust, and not exempt smaller communities from monitoring.

ing and agricultural dust, and not exempt smaller communities from monitoring. The second action that I believe the Federal Government should take to help free Americans from the menace of air-borne particulates is to implement and enforce the existing Clean Air Act provisions that can directly bring about the most dramatic and cost-effective emission reductions. Unfortunately, EPA has chosen instead to half-implement, and even to undermine, the statutory provisions. For instance, in the rule that EPA promulgated recently under the Clean Air Act section that mandates cuts in the interstate transport of air pollution, the Agency avoided requiring steep, prompt, and highly cost-effective reductions in particulate-forming

emissions from fossil fuel-fired powerplants. Because EPA has chosen to let off the hook the wealthy, heavy, upwind polluters that could have achieved the most dramatic reductions at the lowest cost, State and local officials such as those testifying before this subcommittee today are left to piece together, from a large number of expensive and politically difficult measures, the remaining cuts that are needed to

protect public health.

Dealing another blow to State and local governments, EPA has in recent years taken pains to undermine the Clean Air Act provisions that require coal-fired powerplants to accompany otherwise pollution-increasing renovations with environmental upgrades that slash a plant's pollution by ninety percent or more. According to the Agency's own inspector general, EPA's polluter-friendly rule changes stand to prevent Federal, State, and local enforcers from securing millions of tons-per-year of highly cost-effective reductions in particulate-forming emissions. Again, the consequence will be that State and local governments must squeeze the needed reductions from myriad smaller businesses that cannot deliver them as easily.

My second request, then, is for EPA to return to a policy of implementing, as opposed to undermining, the Clean Air Act provisions that can directly achieve the largest and most cost-effective cuts in particulate-forming emissions. Specifically, I ask that EPA undo the provisions in its pollution transport rule that make it difficult for States to obtain power-plant pollution cuts beyond the insufficient ones required by EPA's rule. Further, I ask that EPA abandon its regulatory effort to undermine the Clean Air Act's New Source Review provisions and resume enforcing

those provisions against coal-fired powerplants that flout them.

Finally, I believe the public is justified in expecting the Federal Government to appropriate reasonable amounts of money to help State and local governments bring the areas under their care into line with the national ambient air quality standards for particulate matter. Unfortunately, under the Bush administration's proposed budget for fiscal year 2007, the Federal Government would devote \$35 million less than it has in fiscal year 2006 to helping State and local governments install air pollution monitors and develop and implement plans to reduce particulate concentrations. While the House of Representatives recently voted to restore all the money that the Administration had cut, the bill approved by the Senate Appropriations committee would restore less than half the amount.

My final request, then, is that we members of the Senate spend less time entertaining calls to put off the essential work of cleaning up harmful air pollution, and that we exert more of an effort to appropriate the funds necessary to allow that life-saving work to proceed now.

We owe that to Americans. A breath of fresh air should be a right not a danger.

Thank you, Mr. Chairman.

STATEMENT OF WILLIAM WEHRUM, ACTING ASSISTANT ADMINISTRATOR, OFFICE OF AIR AND RADIATION, U.S. ENVIRONMENTAL PROTECTION AGENCY

Good morning and thank you for the opportunity to discuss our current review of the National Ambient Air Quality Standards (NAAQS) for particulate matter (PM). As you know, the NAAQS for PM and other criteria pollutants are central to the Clean Air Act's regime for protecting public health and the environment from air pollution. The Clean Air Act requires that every 5 years EPA review the NAAQS and revise them as may be appropriate. We are now engaged in this review of the PM NAAQS, and I am pleased to be here today to talk to you about the review, the resulting proposal to revise aspects of the PM standards, and the process for aiding State, local and tribal jurisdictions in meeting any revised standards.

As context for the current PM NAAQS review, I will begin by noting the impressive progress this Nation has made in combating air pollution and the critical role the NAAQS process has played in achieving that success. Since enactment of the Clean Air Act in 1963, Congress has committed the Federal Government to work with State and local jurisdictions to ensure that the American people have clean air to breathe. And we have made great progress in cleaning up air pollution even as our economy has grown. Between 1970 and 2005, gross domestic product increased 195 percent, vehicle miles traveled increased 178 percent, energy consumption increased 48 percent, and U.S. population grew by 42 percent. During the same time period, total emissions of the six principal air pollutants dropped by 53 percent. From 1990 to 2002, air toxic emissions declined by 42 percent.

The NAAQS process has been the linchpin of our success in reducing concentrations of criteria air pollutants. The Clean Air Act establishes a two-step process for addressing such pollutants. First, it requires that we set and periodically review and revise as appropriate NAAQS to protect public health and welfare. "Primary"

NAAQS must be set at a level requisite to protect public health with an adequate margin of safety, and "secondary" NAAQS must be set at a level requisite to protect public welfare from adverse effects (including effects relating to visibility, soils, vegetation, water, crops, climate, and man-made materials.) Both types of NAAQS are to be based on the latest available scientific information. Compliance costs may not be considered in setting the standards. In the second step of the NAAQS process, the statute calls on the States, with EPA assistance, to develop and implement plans for attaining and maintaining the primary and secondary standards. At this second step, cost and other factors may be considered in designing implementation plans that make good environmental and economic sense.

Of the many air pollutants regulated by EPA, fine particles likely pose the greatest threat to public health due to the number of people exposed. Studies in the peer-reviewed literature have found that these microscopic particles, which can reach the deepest regions of the lungs, are associated with premature death, aggravation of heart and respiratory disease, asthma attacks, lung cancer, and chronic bronchitis. Estimates based on the literature indicate the possibility that thousands of premature deaths occur each year at current PM levels in some of the country's largest urban areas. PM's impacts also lead to increased hospitalizations, emergency room and doctor visits, lost work days, lost school days, and increased use of medication,

among other adverse effects.

Many of EPA's recent regulations to reduce air pollution are designed in large part to reduce fine particles. In particular, EPA's 2004 Clean Air Nonroad Diesel Rule and 2005 Clean Air Interstate Rule will significantly reduce levels of fine par-

ticles in many communities.

The Bush administration is committed to using the best science available in reviewing the PM NAAQS and deciding whether the standards should be revised. Since the last review of the PM NAAQS, a large number of peer-reviewed studies relevant to assessing the health and welfare effects of PM have become available. For this review, EPA evaluated studies that addressed a wide range of issues including PM toxicology, epidemiology, physics, chemistry, and measurement; sources and emissions; environmental effects and exposure. Approximately 2000 studies were referenced in EPA's assessment of the potential health and environmental impacts of particles. EPA's assessment encompassed a review of the strengths and limitations of an extensive body of toxicological and epidemiological evidence evaluating potential morbidity and/or mortality effects. They also included a critical review of potential welfare effects related to PM, including effects on visibility, vegetation and ecosystems, and man-made materials. Considered together, the studies significantly advanced our understanding of PM's effects on public health and welfare and reduced the scientific uncertainty associated with some important aspects of the science.

In assessing potential human health effects, EPA considered a wide range of epidemiologic studies evaluating short-and long-term exposures to particles in single and multiple cities. These studies addressed a variety of health endpoints including respiratory and cardiovascular effects, which in some cases lead to premature mortality. As part of our assessment, we also considered impacts on potentially susceptible or vulnerable subpopulations. A number of such population subgroups have been identified, including individuals with preexisting heart or lung disease, chil-

dren, and the elderly.

EPA's assessment of the relevant studies was set forth in a "criteria document," which was completed in October 2004. Drawing on what EPA considers to be the most reliable, relevant studies, EPA also performed a risk assessment to estimate the degree to which various approaches to revising the standards would affect the public health risks posed by PM. In addition, EPA's technical staff prepared a "staff paper" to bridge the gap between this science assessment and the policy judgments required in making decisions on the NAAQS. It provided an integration of the most policy-relevant scientific information (namely, the information relating to possible indicator, averaging time, form, and level of potential standards), presented and interpreted the major findings of the risk assessment, and included staff-identified ranges of policy options and alternative standards for the Administrator to consider.

In keeping with their importance to the review and revision process, the criteria document, staff paper and risk assessment were developed with extensive involvement of representatives of the scientific community, industry, public interest groups and the general public. We held many public meetings with the Clean Air Scientific Advisory Committee (CASAC)—a statutorily-mandated group of independent scientific and technical experts appointed by the Administrator to review criteria documents and existing NAAQS and make recommendations as appropriate—to receive their comments on successive drafts of the criteria document, staff paper and risk

assessment.

Based on the results of this extensive scientific review and assessment process and considering the policy implications of that assessment, EPA Administrator Steven Johnson signed a proposal on December 20, 2005 to revise the PM NAAQS to better protect public health and welfare from the harmful effects of PM. The proposed suite of standards reflected the Administrator's best provisional judgment regarding the application of the scientific information about how ambient levels of PM impacts public health and environment. In our proposal, we also sought public comment on alternative standards in recognition of the range of standards that the scientific record could support.

Since issuing the proposal, the Agency has made additional efforts to involve the since issuing the proposal, the Agency has made additional entries to involve the public in this important rulemaking. On March 8, 2006, wheld all-day public hearings in Chicago, Philadelphia and San Francisco. In addition, there was a 90-day period from January 17, 2006–April 17, 2006 during which the public could submit written comments to the Agency. Before coming to a final decision on the PM NAAQS, EPA will review and analyze the issues, evidence, and arguments raised in oral and written comments. We are now in the midst of this process.

We recognize that additional scientific studies on the health effects of PM have been published since the PM criteria document was completed. As a continuation of the scientific review process, EPA has been conducting a survey of the scientific evidence reported in the recent literature with emphasis placed on specific studies that are most relevant to the proposed PM NAAQS decision. The survey will ensure that before making a final decision, the Administrator is fully aware of the new science that has developed. We intend to provide the public with an opportunity to review the results of the survey prior to making a final decision on revising the PM NAAQS. After our review is complete, the Administrator will make final decisions regarding revisions to the PM NAAQS. We are scheduled to issue a final rule re-

flecting those decisions by September 27, 2006.

While EPA may not consider compliance costs in setting NAAQS, the Agency typically prepares a Regulatory Impact Analysis (RIA) for NAAQS rules to provide information to States and the public on the controls, disbenefits and costs that meeting the NAAQS would likely entail. In the case of the current PM NAAQS review, EPA will provide a national-scale assessment of costs and benefits in the RIA for any revised PM2.5 standards. We will share the results of our national-scale assessment with you as soon as they are available. In the RIA, EPA will ensure that all information presented clearly distinguishes between the costs and benefits of those efforts necessary to meet current standards and additional—i.e. incremental—costs and benefits that will be incurred as a result of efforts to reach attainment with any revised standards. The RIA will also examine the extent to which controls applied to attain the current standards by 2015 would also be effective to help attain alternative, more stringent standards by 2020.

PROPOSED REVISIONS OF THE PM NAAQS

The proposed revisions of the PM NAAQS address two categories of particles: fine particles, or PM_{2.5}, which are 2.5 micrometers in diameter or smaller and inhalable coarse particles, or PM_{10-2.5}, which are smaller than 10 middles in diameter but larger than PM_{2.5}. We have had specific NAAQS for PM_{2.5} since 1997 and for parlarger than PM_{2.5}. We have had specific NAAQS for PM_{2.5} since 1997 and for particles 10 micrometers and smaller, or PM₁₀, since 1987. (We also have had NAAQS for various types of particles, of which both fine and coarse PM are subsets, since the inception of the NAAQS in 1971.) Based on the latest scientific information, we proposed specific revisions to the current PM standards and requested comments on a range of alternative standards for both fine and inhalable coarse particles. The proposed revisions address changes to both the primary standards to protect public health and the secondary standards to protect public welfare including visibility impairment.

With respect to primary standards to protect public health, EPA proposed:
1. Lowering the level of the 24-hour fine particle standard from the current level

of 65 micrograms per cubic meter ($\mu g/m^3$) to 35 $\mu g/m^3$. We requested comment on retaining the current level of the standard (65 $\mu g/m^3$); on levels between 25 and 65 μg/m³; and on alternative approaches for selecting the level of the standard.

2. Retaining the level of the annual fine particle standard at 15 μ g/m³. We requested public comment on a range of levels from 15 μ g/m³ down to 12 μ g/m³.

3. Establishing a new indicator for inhalable coarse particles — PM_{10-2.5}. Reflecting the available science on PM health effects, the proposed new PM_{10-2.5} standard would include any ambient mix of PM_{10-2.5} which is dominated by resuspended dust from high-density traffic on paved roads and PM generated by industrial sources and construction sources, and excludes any ambient mix of $PM_{10-2.5}$ which is dominated by rural windblown dust and soils and PM generated by agricultural and mining sources. We proposed setting a 24-hour standard for inhalable coarse particles at 70 µg/m³ (98th percentile). Under the proposed regulations, agricultural sources, mining sources, and other similar sources of crustal materials would not be subject to control in meeting the standard. We further proposed monitoring siting criteria which would determine which monitoring results could be used for comparison with the proposed PM_{10-2.5} NAAQS. We requested comment on selecting a level down to 50 μg/m³ (98th percentile) or below and/or selecting an unqualified PM_{10-2.5} indicator. We also asked for comment on whether we should retain the current 24-hour PM_{10} standard in place of the proposed $PM_{10-2.5}$ standard or whether we should not establish a coarse PM standard at this time pending the development of a coarse fraction monitoring network and further research on the health effects of coarse particles.

We also proposed that the secondary standards for both fine and coarse particles be identical to the primary, health-based standards. We requested comment on setting a sub-daily (4–8 hour averaging time) $PM_{2.5}$ standard to address visibility impairment, within the range of 20–30 $\mu g/m^3$ (with a form within the 95th percentile).

Inhalable coarse particles, or $PM_{10-2.5}$, is a subset of the type of PM controlled by existing standards for PM_{10} . Issuance of a standard for $PM_{10-2.5}$ would thus raise the issue of what should happen to the current PM_{10} standards. We proposed that the current annual PM_{10} standards should be revoked in all areas based on our view that the current scientific evidence does not support setting a standard for long-term exposure of inhalable coarse particles. In light of our proposal to adopt a 24hour primary standard for $PM_{10-2.5}$, which would address short-term exposure, we proposed to revoke the current 24-hour PM_{10} standard, except in areas that have at least one monitor that is located in an urbanized area with a minimum population of 100,000 people and that has measured a violation of the 24-hour PM_{10} standard based on the most recent 3 years of data. In essence, we proposed to retain the current 24-hour PM₁₀ standard only in areas which could be in violation of the proposed PM_{10-2.5} standard, in light of the proposed monitoring siting criteria.

In a separate rule that is partially tied to the proposal to revise the PM NAAQS, we proposed revisions to the ambient air monitoring requirements for PM and other criteria pollutants. The proposed changes support the proposed revisions to the PM NAAQS, including new minimum monitoring network requirements for inhalable coarse particles ($PM_{10-2.5}$) and criteria for approval of applicable sampling methods. These proposed changes would also establish a new nationwide network of monitoring stations that take an integrated, multi-pollutant approach to ambient air monitoring in support of multiple objectives. The proposed amendments would modify the current requirements for ambient air monitors by focusing requirements on populated areas with air quality problems. The purpose of these proposed changes is to enhance ambient air quality monitoring to better serve current and future air quality management and research needs.

IMPLEMENTATION OF THE PM NAAQS

The Clean Air Act gives States the lead in implementing NAAQS standards. In the case of any revised PM NAAQS, implementation would be governed by subpart 1 of part D of title I, which provides States with the most flexibility in determining

when and how to achieve attainment of the standards.

If the PM NAAQS are revised, EPA will work with States to ensure a smooth transition between current standards and any revised standards so that their control efforts are as cost-effective as possible. As a first step, in conjunction with our December 2005 proposal to revise the NAAQS, EPA issued an advanced notice of proposed rulemaking (ANPR) in January 2006 identifying and seeking comment on a number issues related to the transition between current PM standards and the proposed revisions to fine particle standards and proposed new coarse particle standards. In the ANPR, EPA laid out for both proposed fine and coarse PM standards possible timelines for designations of areas as in attainment or nonattainment of the standards, submittal of State Implementation Plans (SIPs), and attainment dates. As EPA explained in the ANPR, we would likely designate areas as in attainment or nonattainment of any revised fine particle standard no later than December 2009, and designations would become effective in April 2010. Assuming designations took effect then, States and other implementing agencies would likely have until April 2013 to submit their attainment demonstrations and SIP revisions. For any areas designated as nonattainment for a revised fine PM standard, the initial attainment date would be "as expeditiously as practicable, but no later than 5 years from the date of designation," or April 2015. Some areas might also qualify for an extension of the attainment deadline by up to 5 years, or April 2020. Assuming the ANPR timeline were followed, any additional controls needed for attainment would

likely phase in between 2013 and 2015 or up to 2020 for areas that qualify for an extension.

As for any transition from a PM_{10} to a $PM_{10-2.5}$ standard, since the deployment of the necessary monitoring network would take several years, it is likely that nonattainment designations for any new $PM_{10-2.5}$ standard would not occur until 2013 at the earliest. Submittal of nonattainment area SIPs would follow in 2016, and attainment dates would be no later than 2018, or 2023 in the case of areas that qualified for the maximum 5-year extension. In the ANPR, EPA also shared its preliminary thinking about how to address some of the key New Source Review issues related to the proposed coarse PM standard.

We issued the ANPR as a companion piece to the PM NAAQS proposal so that we could give our State, local and tribal partners insight into, and an opportunity to help shape, any transition to revised standards. We believe any actions a State or other jurisdiction takes to meet the 1997 PM NAAQS would be helpful in meeting any revised PM NAAQS. We understand that many States and local governments are concerned about facing another round of designations for a NAAQS. I assure you

that we are committed to working through this process with them.

Attaining both the current fine particle standards and any possible revised fine particle standards will involve a combination of national, regional, and local emissions control measures. EPA has already established several national regulations to reduce emissions contributing to fine particle pollution from gasoline and diesel engines. In addition, in May 2005, EPA finalized the Clean Air Interstate Rule, with emissions caps requiring significant reductions in sulfur dioxide (SO₂) and nitrogen oxides (NOx) emissions from electric generating units in the eastern United States in 2010 and 2015. Both SO₂ and NOx can contribute to particle formation. States are now evaluating a range of local emission reduction strategies to address emissions from additional stationary, mobile, and area sources.

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The Administration is committed to working with Congress to pass Clear Skies legislation to improve upon our CAIR and CAMR rulemakings. The President's Clear Skies Act would require a 70 percent annual cut in powerplant pollution (NOx, SOx and mercury) nationwide when fully implemented. The legislation would expand the successful "cap and trade" approach used in the Title IV Acid Rain Program, which has obtained significant pollution reductions sooner than expected, achieved nearly full compliance, and did not significantly impact the price of electricity for American consumers and businesses. In similar fashion, Clear Skies would significantly improve air quality, maintain energy diversity, keep electricity prices affordable for Americans, and encourage more reinvestment and new jobs in urban communities. Legislation is preferred over administrative rulemaking because it fends off litigation and delay, and it would allow creation of a nationwide program rather than just a regional one.

CONCLUSION

In conclusion, the latest science tells us that current levels of particle pollution in some of the country's largest urban areas continue to threaten public health. The Clean Air Act tells us how to proceed in setting the standards and offers flexibility in how to implement those standards. We are sensitive to the concerns that members of this Committee and others have raised about the challenges in meeting any revised PM NAAQS. We are committed to setting the standards based on science and implementing them based on common sense.

STATEMENT OF JOHN PAUL, SUPERVISOR, REGIONAL AIR POLLUTION CONTROL AGENCY

Good morning, Mr. Chairman and members of the subcommittee. I am John Paul, supervisor of the Regional Air Pollution Control Agency (RAPCA) in Dayton, OH and president of ALAPCO, the Association of Local Air Pollution Control Officials. While I appear here today on behalf of RAPCA, my testimony is endorsed by ALAPCO and its sister organization, STAPPA—the State and Territorial Air Pollution Program Administrators. These two national associations of clean air agencies in 54 States and territories and over 165 major metropolitan areas across the United States have primary responsibility under the Clean Air Act for implementing our Nation's air pollution control laws and regulations and, even more importantly, for achieving and sustaining clean, healthful air throughout the country.

for achieving and sustaining clean, healthful air throughout the country. I commend you for convening this hearing on the U.S. Environmental Protection Agency's (EPA's) proposed revisions to the National Ambient Air Quality Standards (NAAQS) for particulate matter, or PM. The PM NAAQS are critically important to State and local clean air agencies, which have an extensive record of comments to

EPA on this issue. I, along with colleagues of mine from across the nation, provided testimony at all three of EPA's public hearings; we also offered comprehensive written comments.

Particulate matter is not only one of the most serious air pollution problems facing our nation, it is one of our country's most significant environmental problems. And the science bears this out.

In December 2005, over 100 doctors, scientists and public health professionals wrote to EPA Administrator Stephen Johnson citing the serious health effects of fine particulate matter, concluding:

The major health effects of fine particulate matter include reduced lung function, cough, wheeze, missed school days due to respiratory symptoms, increased use of asthma medications, cardiac arrhythmias, strokes, emergency room visits, hospital admissions, lung cancer, and premature death-at levels well below the current national air quality standards.

Since the PM standard was last revised in 1997, there have been over 2,000 peerreviewed scientific studies analyzing the health and welfare effects associated with this pollutant. The body of evidence, according to the scientists and health professionals, "validate[s] earlier epidemiological studies linking both acute and chronic fine particle pollution with serious morbidity and mortality . . . and identify[ies] health effects at lower exposure levels than previously reported" (December 2005 letter). In fact, EPA's own risk assessment estimates that more than 4,700 people die prematurely each year in just nine U.S. cities at the current $PM_{2.5}$ levels.

The Clean Air Act defines the process EPA must follow in setting, or revising, the NAAQS. In sections 108 and 109, the Administrator is required to set, and revise at 5-year intervals, standards "the attainment and maintenance of which in the judgment of the Administrator, based on such criteria and allowing an adequate margin of safety, are requisite to protect the public health." The Administrator is also required to appoint an "independent scientific review committee"—the Clean Air Scientific Advisory Committee (CASAC)—that "shall recommend to the Administrator any new [NAAQS] and revisions of existing criteria and standards as may be

There are existing NAAQS for two kinds of particulate matter: one for particles 10 micrometers and smaller (PM₁₀). set in 1987, and one for fine particles 2.5 micrometers and smaller (PM_{2.5}), established in 1997. In December 2005, EPA proposed revisions to the PM standards, including changing the fine particle standard and creating a new standard for inhalable coarse particles (PM_{10-2.5}), which are smaller than 10 micrometers in diameter, but larger than PM_{2.5}

In its proposal, EPA recommends, among other things, (1) lowering the 24-hour fine particle standard from the current level of 65 micrograms per cubic meter (µg/ m³) to 35 μg/m³, (2) retaining the level of the annual fine standard at 15 μg/m³ and (3) replacing the current PM₁₀ standard with a new 24-hour PM_{10-2.5} standard at 70 $\mu g/m^3$. In addition, EPA proposes exempting from the coarse particle standard "any ambient mix of $PM_{10-2.5}$ where the majority of coarse particles are rural wind-blown dust and soils and PM generated by agricultural and mining sources." We have carefully reviewed EPA's proposal to revise the PM NAAQS and are deeply troubled with several major aspects, including the levels of the $PM_{2.5}$ stand-

ard and the exemptions EPA proposes.

First, we are very concerned that EPA did not follow the recommendations of CASAC in setting the PM_{2.5} annual standard. Rather than relying upon the consensus recommendation CASAC had proposed, EPA instead chose to retain the current annual standard. Perhaps not surprisingly, this prompted a significant reaction by CASAC, which sent EPA Administrator Stephen Johnson a letter (March 21, 2006) requesting that EPA reconsider its proposal and set the annual standard "within the range previously recommended" (13–14 μg/m³) and clarifying why it was important to select a tighter level. CASAC stated:

In summary, the epidemiological evidence, supported by emerging mechanistic understanding, indicates adverse effects of PM_{2.5} at current average annual levels below 15 μ g/m³. The [CASAC] PM Panel realized the uncertainties involved in setting an appropriate health-protective level for the annual standard, but noted that the uncertainties would increase rapidly below the level of $13 \mu g/m^3$. That is the basis for the PM Panel recommendation of a level at 13– 14 μg/m³. Therefore the CASAC requests reconsideration of the proposed ruling for the level of the annual $PM_{2.5}$ NAAQS so that the standard is set within the range previously recommended by the PM Panel, i.e., 13 to $14~\mu g/m^3$.

Accordingly, we strongly urge that EPA follow CASAC's advice to tighten the annual PM_{2.5} standard by selecting a level within the recommended range.

We are also disappointed with the level EPA set for the daily PM_{2.5} standard. While we appreciate that EPA selected a level of the standard within the range recommended by CASAC, we note that the level—35 µg/m³—was not only at the high end of the range, but was inconsistent with the EPA Staff Paper recommendation (June 2005) that conditioned adoption of 35 μg/m³ on tightening the annual stand-

With respect to the $PM_{10-2.5}$ standard, we strongly oppose EPA's exemptions for major sources contributing significantly to coarse PM emissions, especially agriculture, mining and other sources of crustal material. This appears to be an unpreculture, mining and other sources of crustal material. edented action: to our knowledge EPA has never before set a NAAQS that allows major source categories to be altogether excluded from control requirements. CASAC is also concerned, commenting that its members "neither foresaw nor endorsed a standard that specifically exempts all agricultural and mining sources. . . . "

We are very concerned that excluding these sources implies their emissions are not harmful, yet EPA does not provide any such evidence. It appears likely that pesticide-, herbicide- and toxic-laden coarse particles from agriculture, and metals-coated coarse particles from mining, respectively, pose risks similar to urban coarse PM that is dominated by resuspended dust from high density traffic and industrial sources. In addition, rural windblown dust (i.e., crustal material) may contain toxic elements. If any exemptions are warranted, they should be considered during the implementation phase—when costs and practicability issues are allowed to be considered—but not during the process of setting a health-based standard.

We are also very troubled that EPA is proposing to exempt major portions of the

country—those with less than 100,000 people—from monitoring for coarse particles. This action has the practical effect of ignoring the health and welfare of millions of people throughout the Nation. We believe this is not only an unprecedented action, it totally ignores the recommendations of CASAC, which concluded "it is essentially ignores the recommendations". tion, it totally ignores the recommendations of CASAC, which concluded it is essential to have data collected on the wide range of both urban and rural areas in order to determine whether or not the proposed . . . standard should be modified at the time of future reviews" (March 21, 2006).

Finally, we believe, as CASAC suggests, that EPA should set a sub-daily standard for PM_{2.5} to protect against visibility impairment. In its proposal, EPA relies on the primary daily standard for visibility protection, but this is not sufficient to help

States and localities make reasonable progress toward their regional haze goals, as mandated under the Clean Air Act.

Once EPA sets the new PM standards, States and localities will begin their process of taking steps toward meeting the standards. This will involve, among other things, monitoring air quality, designating new "nonattainment" areas and developing State Implementation Plans (SIPs) that include all of the enforceable measures—Federal, State and local—necessary to bring areas into attainment by the required deadlines. Areas will not be required to reach attainment of the new PM standards until 2015 for PM_{2.5} and 2018 for PM_{10-2.5}, with the possibility of additional extensions for 5 or more years.

In the meantime, States and localities are now in the process of developing SIPs to meet the existing PM_{2.5} standard, established in 1997. There are several actions Congress and EPA could take now, not only to assist State and local agencies in implementing the existing PM standard, but to also help make progress on our glide path toward achieving the new PM standards.

First, most areas of the country will need to rely heavily upon national or regional strategies to meet the existing PM_{2.5} standard. These include strategies to regulate electric generating units, industrial boilers, cement kilns and the like. These industrial to the country will be a standard or regional strategies to regulate electric generating units, industrial boilers, cement kilns and the like. trial sectors offer the most significant and cost-effective opportunities for reducing PM_{2.5} and its precursors. A national rule not only provides consistency and certainty for industry, but offers the added advantage of administrative expediency for State and local agencies, obviating the need for each State and/or locality to examine each sector and develop separate rules.

EPA took a good first step in publishing its Clean Air Interstate Rule (CAIR), designed as an interstate air pollution control strategy to regulate electric utilities in the eastern United States. But, as we commented when that rule was proposed, the compliance deadlines are too long, the emissions caps are not sufficiently stringent and the rule only covers electric utilities, when other sources-–such as industrial boilers and cement kilns—also warrant a national approach.

It is important to recognize that the development of SIPs requires a "zero sum" calculation. To the extent that a Federal rule falls far short of what an industrial sector can achieve in a cost-effective and/or timely manner, those lost opportunities will have to be made up by some other sector of the economy, generally a small business or other regulated entity for which the costs are higher and regulation is less cost effective.

Perhaps it is best to illustrate this with an example. EPA estimated that the benefits of CAIR are between 30 and 35 times as great as the costs. For every dollar spent under CAIR to control emissions of $PM_{2.5}$ precursors, society gets between \$30 and \$35 in benefits. And these EPA benefit estimates do not include important nonmonetary benefits, such as reducing acid deposition and improving visibility in many national parks.

We believe that EPA not only missed a huge opportunity with respect to regulating electric utilities, but it also ignored Executive Order 12291, which states, among other things, that when publishing regulations, "agencies should set regulatory priorities with the aim of maximizing the aggregate net benefits to society. . . ." Given these huge benefit-to-cost ratios in favor of reducing PM_{2.5} precursor emissions, we urge that EPA require further reductions from the electric utility sector, as well as from other promising sectors for national regulation, starting with industrial boilers and cement kilns.

Second, EPA must issue its PM_{2.5} implementation rule, which identifies the general measures and other important provisions that will be required for SIPs. EPA has promised this rule for at least 3 years and there is simply no excuse for further delay. Most States need a year or more to fulfill their own administrative requirements for adopting rules and regulations and have already begun preparing their SIPs. But this effort is hampered by the lack of guidance from EPA on what these SIPs must contain. Not only is this rule crucial for States in preparing their SIPs, it is also vitally important for explaining to those living in nonattainment areas

what requirements will apply to their areas.

Third, Congress and EPA can help States and localities meet their federally mandated responsibilities under the Clean Air Act by ensuring that State and local agencies have adequate funding and other important regulatory tools. This is essential at a time when agencies are significantly expanding their responsibilities, including the development of PM_{2.5} SIPs. Unfortunately, the Administration's fiscal year 2007 budget calls for cuts in grants to State and local air agencies of \$35.1 million, including reductions for State and local agency staff under section 105 of the Clean Air Act and for monitors—including PM—under section 103. Additionally, the President's budget calls for a different mechanism for PM monitoring grants, requiring State and local agencies to match those grant funds, which could be a burden for many agencies. While the House of Representatives voted recently to restore the full \$35.1 million cut, the Senate Appropriations Committee has restored just \$15 million. We strongly urge the full Senate to restore the remainder of the cuts.

We also believe that Congress and EPA should increase Federal funding for training programs that will provide Federal, State and local governmental officials with the skills they need to successfully fulfill their Clean Air Act implementation and enforcement responsibilities. Doing so will not only ensure the greatest return on our clean air investments, it is also required by section 103 of the Clean Air Act. However, because EPA has continued to reduce its financial support for training in recent years, State and local air agencies are now bearing a disproportionate share of the cost, contributing \$2.0 million per year versus less than \$500,000 annually

Finally, we applaud you, Chairman Voinovich, and your colleagues on the Senate Environment and Public Works Committee, for your leadership in seeking to clean up emissions from diesel engines, which contribute significantly to PM levels. We not only support the Diesel Emission Reduction program included in the Energy Policy Act passed by Congress last year, we also endorse the President's request for \$50 million for this program in FY 2007.

In conclusion, we urge that EPA make significant changes to the PM National

Ambient Air Quality Standards by tightening the annual PM_{2.5} standard, eliminating exemptions in the PM_{2.5} standard, requiring monitoring in both urban and rural areas, and taking important steps—regulatory and funding—to help States and localities comply with the existing and new PM standards.

Thank you for the opportunity to testify. I would be happy to answer any of your questions.

STATEMENT OF LARRY J. GOULD, CHAIR, LENAWEE COUNTY BOARD OF COMMISSIONERS

Good morning Mr. Chairman and members of the subcommittee. My name is Larry Gould. I am chairperson of the Lenawee County Board of Commissioners, a position I have held since 2001. Thank you for the opportunity to testify today regarding EPA's proposed revision of the $PM_{2.5}$ standard. By way of background, I have served as a County Commissioner for Lenawee County, Michigan, for the past 32 years. Lenawee County is located in southeast Michigan on the State line across from Ohio. The county seat, Adrian, is approximately 35 miles from Toledo, Ohio, 40 miles from Ann Arbor, Michigan, and 70 miles from Detroit. I have served as chairperson of the County's Personnel/Ways and Means Committee for many years during my service on the County Commission. My family has been engaged in farming since the area was settled in 1835. Lenawee County has a population of slightly over 100,000 and is largely rural.

Lenawee County has a population of slightly over 100,000 and is largely rural. Being located near major metropolitan and industrial areas—in particular, Detroit—has affected Lenawee County's air quality. As a consequence, Lenawee County has been designated by EPA as a "marginal" nonattainment county for EPA's 8-hour-ozone standard, despite the fact that the single monitor located in Lenawee has shown compliance with the ozone standard for the past six (6) years. Lenawee is designated nonattainment because all nine (9) ozone monitors throughout the Detroit area must show compliance with the standard. Seven other counties in southeast Michigan are also designated nonattainment for the 8-hour-ozone standard.

Fortunately, Lenawee is not designated as nonattainment—at least not yet—for any other National Ambient Air Quality Standard, including PM_{2.5}. However, there are seven (7) Michigan counties that are designated nonattainment for the existing

 $PM_{2.5}$ standard.

The Michigan Department of Environmental Quality (MDEQ) and the Southeast Michigan Council of Governments (SMCOG) submitted an ozone attainment strategy to EPA in June 2005. This strategy is comprised of three categories of control measures: selected controls, contingency measures, and voluntary measures. Selected controls include a lower vapor pressure fuel. MDEQ and SMCOG are in the process of obtaining legal authority to implement these measures. However, without concerted efforts by our more populated neighbors to control their air emissions, any efforts by Lenawee County to regulate its own air emissions will almost certainly prove to be futile. This is the case with either ozone or a revised PM_{2.5} standard.

In January, EPA proposed to revise the 24-hour National Ambient Air Quality Standard for PM_{2.5} EPA also asked for comment on whether to revise the annual PM_{2.5} standard. I am very concerned that a revision of the PM_{2.5} standard would result in Lenawee County being designated nonattainment for PM_{2.5} for the same reason the county is designated as nonattainment for ozone. That is, Lenawee would be included in a multi-county nonattainment area whose air quality is dominated largely by emissions from more heavily populated counties. Even though it is not our fault, Lenawee will be forced to comply with restrictions that are likely to impede our attempts to attract new industry and expand our economic base

pede our attempts to attract new industry and expand our economic base.

According to MDEQ, three counties with particulate matter monitors (Wayne, Monroe and Oakland) currently show a violation of the revised 24-hour standard proposed by EPA. I am aware of estimates that suggest a significant increase in the number of nonattainment counties in Michigan if the PM_{2.5} standard is revised. These estimates indicate that the 24-hour standard proposed by EPA combined with a modest revision of the annual standard could more than double the current number of nonattainment counties in Michigan from seven (7) counties to 16 counties. According to these estimates, Lenawee would be one of those 16 PM_{2.5} nonattainment counties. As a consequence, Lenawee, a rural county with a small population and good air quality, would be nonattainment for both ozone and a revised PM_{2.5} standard. This is not a prospect I look forward to as the chairperson of the Board of Commissioners.

Lenawee's citizens and businesses will bear the costs of controlling emissions to reach attainment with the 8-hour-ozone standard. We will almost certainly bear additional costs if EPA revises the $PM_{2.5}$ standard and Lenawee is designated as nonattainment. It is difficult to predict what specific control measures Lenawee County would have to adopt in order to comply with a revised $PM_{2.5}$ standard. As you know, State and local governments are still in the process of deciding how they will come into compliance with the current $PM_{2.5}$ standard. In fact, this is one of my concerns. EPA might change the 1997 $PM_{2.5}$ standard before States have come into compliance with it.

As you know, National Ambient Air Quality Standards are developed by EPA without regard to how much it would cost to comply with them. Costs for implementing and complying with air quality standards are borne to some extent by State and local governments. As a county commissioner, it is very clear to me that the costs of implementing clean air standards are significant unfunded Federal mandates. The cost of these unfunded mandates can be substantial, with minimal air quality benefits for counties like Lenawee. For example, the Lenawee Board of County Road Commissioners informs me that highway funds have been made available to Lenawee County through Congestion Mitigation Air Quality (CMAQ) funding

to improve air quality in the county. However, they point out that the current level of CMAQ funding "appears to be a drop in the bucket" compared to the funding that will be needed if EPA makes the 1997 standards more stringent. In addition, the Michigan Association of Counties informs me that "any new particulate matter standards which push costs to the counties would be impossible for us to support, unless the commensurate amount of Federal funding were appropriated for us to implement these standards." The Association's concern is based on its estimate that one third of Michigan's counties are required to pay over \$1.1 billion annually for Federal and State mandates, but the counties are reimbursed for only half that amount.

There is little doubt in my mind that imposition of new mandates would have a negative impact on economic growth and development in Lenawee County. Like most counties in Michigan, Lenawee continues to struggle with high unemployment and an uncertain economy. I am concerned that nonattainment requirements are

likely to impede ongoing efforts to expand economically and create jobs.

The Lenawee Chamber for Economic Development has written me recently to express their concern about the serious negative impacts to our local economy if EPA revises the $PM_{2.5}$ standard. The Chamber points out the closure of plants and the continuing loss of manufacturing plants in Lenawee. Most of these plants were older and relied on out of date technologies. If Lenawee if classified as a $PM_{2.5}$ nonattainment county, the Chamber believes that we will continue to lose jobs and have difficulty attracting facilities with newer and better environmental controls. In fact, the Chamber estimates that a nonattainment designation could result in the potential loss of over 1000 current jobs, three fourths of which would be in the chemical industry.

Over the past several years, Lenawee County has assumed a leadership role in developing facilities to produce cleaner burning fuels. A \$60 million ethanol plant is currently under construction in the southeast part of our county, and a biodiesel blending facility is planned for construction in Adrian. The ethanol plant will produce 57 million gallons of ethanol annually and is expected to begin production early next year. We are proud of the jobs these facilities will bring to the county and the fact that cleaner burning fuels will help reduce harmful air emissions. Our plan is to almost double the capacity of the ethanol plant sometime in the future. However, I am very concerned that the expansion might face serious impediments and delays in obtaining the necessary air permits if Lenawee County is designated nonattainment for $\mathrm{PM}_{2.5}$. Because the biodiesel facility will blend rather than produce fuel, I hope that we will not encounter any significant problems if Lenawee is designated nonattainment.

Right now, I believe it makes more sense to focus our efforts at the State and local level on reaching attainment with the 1997 standards for ozone and PM_{2.5}. I would urge EPA and Congress to provide State and local governments with all the administrative and financial support they need to implement the current standards, rather than change the standards now, which would increase the number of non-attainment counties, impose significant unfunded mandates on State and local government, and require other measures that are almost certain to adversely affect eco-

nomic growth in areas like Lenawee County.

RESPONSES BY LARRY J. GOULD TO ADDITIONAL QUESTIONS FROM SENATOR VOINOVICH

Question 1. I know that you care about public health, and everyone wants to see our communities meet Federal clean air standards—but a community's total wellbeing also is impacted by having well-paying, stable jobs, and a robust local tax base. How would a nonattainment designation impact this aspect of community health?

Response. Nonattainment would mean the continued loss of older manufacturing facilities in the county that cannot afford to meet the higher, more restrictive air quality standards. This would further erode manufacturing jobs as these industries either shut down or relocate to areas (i.e., off-shore) that have less stringent standards. Designating Lenawee County as a "nonattainment" area would almost certainly have a negative effect on industry decisions to invest in our economy thereby reducing overall job opportunities.

The Lenawee Chamber for Economic Development estimates that if Lenawee County is designated as a "nonattainment" area, the potential exists for the loss of over 1,000 current manufacturing jobs, 75 percent of which are in the chemical industry. These chemical plants are, ironically, currently recognized by the EPA for their environmental leadership. This loss of jobs in Lenawee County would equate

to approximately 10 percent of our total manufacturing jobs. A loss of this magnitude would have a tremendous impact on our tax base and would almost guarantee a reduction in needed public services.

We recently received information from our electric utility, Consumers Energy, that if a new generating facility is not in operation in Michigan by 2010, severe shortages and restrictions are projected which will curtail job growth and development potentially affecting public safety. A forerunner of this has been seen this summer with electric utilities struggling to meet service demands during intense heat waves. This has resulted in deaths in major cities and disruptions to businesses and residents.

I believe that my community's well-being will be better served by focusing our efforts on implementing the existing air quality standards rather than moving the goalposts, resulting in job losses, economic stagnation and power shortages.

Question 2. I am concerned that EPA has proposed to "move the goalposts" by establishing new standards even before States send in their compliance programs to meet the existing standards. What will the impact be on States and localities and their planning resources?

Response. As a county commissioner, I am also concerned that EPA might move the goalposts, which would stretch planning resources, impose unfunded mandates, and make it difficult for Lenawee County to attract new industry, expand the county's economic base and create jobs. Job creation is an especially critical issue in Michigan because it has one of the highest unemployment rates in the United States—7 percent for July and a loss of 29,000 payroll jobs during the month. Lenawee's unemployment rate for the first five months of 2006 was even worse, averaging 7.3 percent per month and exceeding 8 percent for two of those months.

By way of background, Lenawee is designated as "marginal" nonattainment for the 8-hour-ozone standard even though the single monitor located in the county has shown no violation of the ozone standard for the past 6 years. The county is designated nonattainment because every monitor throughout the Detroit area must show compliance with the ozone standard.

Fortunately, Lenawee is designated attainment for the existing PM_{2.5} standard. However, I am concerned that a revision of the PM_{2.5} standard could result in Lenawee County being designated nonattainment for PM_{2.5} According to the Michigan Department of Environmental Quality (MDEQ), three counties with particulate matter monitors currently show a violation of the revised 24-hour PM_{2.5} standard proposed by EPA. There are estimates that suggest a revised standard could more than double the current number of nonattainment counties in Michigan from seven counties to 16 counties. If these estimates turn out to be correct, Lenawee would be one of those 16 PM_{2.5} nonattainment counties.

MDEQ is developing strategies to comply with the 8-hour-ozone standard. Lenawee's citizens and businesses will bear the costs of controlling emissions to reach attainment with the 8-hour-ozone standard. I believe that State and local planning resources would be stretched thin in order to comply with a revised $PM_{2.5}$ standard at the same time they have just begun to implement measures to meet both the existing ozone and $PM_{2.5}$ standards.

State and local governments bear significant costs for implementing and complying with air quality standards. Therefore, to State and local officials, the costs of implementing clean air standards are unfunded Federal mandates. The cost of these unfunded mandates is substantial. According to the Lenawee Board of County Road Commissioners, highway funds that have been made available to Lenawee County through Congestion Mitigation Air Quality (CMAQ) to improve air quality in the county would have to be increased substantially if EPA makes the 1997 standard more stringent. However, we do not know how much additional CMAQ funds would be available. In addition, the Michigan Association of Counties indicates that they cannot support a revised standard without a commensurate increase in Federal funding. The Association estimates that one-third of Lenawee will almost certainly bear additional costs and negative employment consequences if the county is designated nonattainment for PM2.5. However, it is difficult to predict right now what specific measures Lenawee County would have to adopt (or their precise consequences) in order to comply with a revised PM2.5 standard because State and local governments are still in the process of determining how they will come into compliance with the existing PM_{2.5} standard.

STATEMENT OF BEBE HEISKELL, COMMISSIONER, WALKER COUNTY, GA

INTRODUCTION

Good morning, Chairman Voinovich, Ranking Member Carper, and Members of

the Subcommittee on Clean Air, Climate Change, and Nuclear Safety.

My name is Bebe Heiskell. I am the sole commissioner of Walker County, Georgia. We are located in the northwest corner of the State just south of Chattanooga. I am in the sixth year of elected office, with a background of 27 years in public administration. Thank you for allowing me to describe the impact that nonattainment designations have on communities like mine.

The hardest part of my job is funding the delivery of services, such as road maintenance and meeting payrolls. I am where the rubber meets the road, face to face every day with the taxpayers that support our governments. Our residents recognize the property tax relief that a strong local economy provides.

BACKGROUND ON WALKER COUNTY

Walker County is a vibrant community of 63,000 people located in the northwest corner of Georgia. While the northernmost tip of the county borders the city of Chattanooga, Tennessee, the vast majority of Walker County is rural. A variety of national and international manufacturers have operations in Walker County and our corner of the State produces the vast majority of the world's carpet. Forty-six percent of Walker County's work force is employed in manufacturing while large numbers of our residents also leave the county each day to commute into Chattanooga for employment. They recognize the property tax relief provided by our industry.

ENVIRONMENTAL QUALITY

Walker County, and indeed the entire region surrounding Chattanooga, Tennessee, is blessed with healthy air and a clean environment. It was not so long ago, during its foundry era, that Chattanooga was named the dirtiest city in America with all the related health issues associated. Indeed, Chattanooga served as a poster child for Congressional efforts to pass the Clean Air Act. Since that time, however, thanks to the Clean Air Act our region has experienced a rebirth as we have cleaned up our environment and improved our air quality while at the same time managing to grow our economy. The businesses in my community have invested millions to reduce their emissions, cars are significantly cleaner than they were just 10 years ago, powerplants have spent billions on controls, and the two large metropolitan areas surrounding us have come into compliance with the 1-hour-ozone standard. Now, I have the pleasure to represent part of what Outside Magazine called one of the ten best places to live in America.

As a community leader and an asthmatic, I appreciate all that EPA has done to see that we have cleaner air. In September 2004 EPA's own status report boasted "U.S. Air Cleanest Ever Since 1970", even while the economy has expanded 150 percent in that time period. American businesses should also be commended for their accomplishments.

ATTAINMENT STATUS

Today the citizens of both Chattanooga and Walker County enjoy clean air and clear skies. Yet, we remain in nonattainment for particulate matter largely through no fault of our own. Walker County's nonattainment status is almost exclusively due to outside influences on our air quality including up to 60 percent natural particulate matter, transported from Alaska, Canada, and amazingly Africa, which is completely out of our control. In addition, we are positioned between Chattanooga and Atlanta; two major interstate highways; and several large manufacturing facilities and powerplants in the region.

Walker County is struggling to attain EPA's air quality standards and have implemented all practicable local control measures. While in nonattainment, we are hopeful that the Agency will eventually place us back into attainment. However, if EPA goes forth with its efforts to further revise the fine particulate matter standards, I simply don't know what we in Walker County will do. To be forced into perpetual nonattainment will have a devastating impact on not only our economy, but

on the lives of our citizens.

IMPACTS OF NONATTAINMENT

Quality growth is vital to Walker County and other communities all over this country. Though our air is improving, I see the job losses that stem from perpetual nonattainment. This adds to the complexity of local governance while we struggle

with public opposition to these nonattainment designations and many of our jobs go

From an economic development standpoint, being in nonattainment of EPA's fine particulate matter standards has serious consequences right now. Many industries begin a site location search using EPA's Internet list of counties in nonattainment.

Those counties never make the list of prospective sites

Walker County has more than 4 million square feet of vacant manufacturing space, in large measure because of the uncertainty our nonattainment designation creates for business prospects. We have had some of our largest employers express frustration at incurring additional costs in order to comply with more stringent air quality standards even as foreign competition continues to squeeze their profit margins. Others have been reluctant to expand, and one business, a major automotive manufacturer facility decided not to locate a plant in the Chattanooga area, in part because of concerns over our attainment status. That plant was eventually located elsewhere, in an attainment area.

Needless to say, our nonattainment designation has caused a real fear of layoffs amongst many of my constituents who have seen jobs elsewhere outsourced to China, Mexico and other foreign nations with little environmental protections. As an elected official, I fear the lost tax revenues and increased stresses on local health

services that lay offs associated with our nonattainment status bring.

Georgia's late Senator Paul Coverdell said, "Investment does not flow toward uncertainty." A never-ending nonattainment designation creates uncertainty for communities and businesses.

I urge the Senate Committee to put EPA's standards in perspective of the loss of jobs and decisions of manufacturers to go abroad where there are no standards. The doubling of the global workforce has created greater competition for each available job. Retraining displaced workers that have lost their lifelong manufacturing jobs is difficult. They, the people we represent, are then concerned only about how they can take care of their families.

Does EPA make decisions based upon the demands of outside environmental

groups, or is there a practical reason to continue to lower this designation?

I ran for office on quality growth and I am a long-time supporter of the environment. However, there must be a balance in all things. Please consider the significant air quality improvements already in place against the impacts of unending nonattainment designations before allowing EPA to stack another set of regulations on businesses and communities like mine.

Thank you for hearing my remarks.

RESPONSES BY BEBE HEISKELL TO ADDITIONAL QUESTIONS FROM SENATOR VOINOVICH

Question 1. I understand that companies seeking to build new facilities will stay away from nonattainment areas and instead go to attainment areas. Has that been

your experience and can you provide specific examples?

Response. It has been the experience of Walker County that companies seeking to build new facilities stay away from nonattainment areas and instead go to attain-

ment areas.

A startup company looked at Walker County's industrial park to relocate there from an Atlanta area that is in nonattainment. They manufacture foil-covered packaging for beer and soft drinks. Our location and transportation corridors were suitable. The price was right for the property. They thought our park was a good fit. They had a contractor available to construct their building. One of their first questions was, "Is Walker County in nonattainment?" Their concern was if we were in nonattainment, it would cost them extra money to meet compliance, and take more time to complete the process. They decided not to locate in Walker County.

At present, an Italian tile company is looking at Walker County. nonattainment will, in all probability, eliminate us because of the additional expense of compliance on Kaolinite. The time line for permitting is also much longer, if they can be per-

Crystal Springs Print Works in Walker County prints a camouflage pattern for the U.S. Military on cotton cloth from Mt. Vernon Mills in Chattooga County. I talked to Steve Tarvin, owner of Crystal Springs Print Works. He told me he already pays annual environmental fees of \$25,000 and a more stringent air quality standard will increase that cost an additional \$30,000. He has a financially marginal company and is the major manufacturer in the City of Chickamauga. More regulations, additional fees, and timelines could also require more staff to maintain compliance.

He stated nonattainment issues could definitely put him out of business and that would also increase cost to Mt. Vernon Mills as well. Mt. Vernon Mills is located in adjoining Chattooga County. Chattooga County is in attainment.

Many times companies do not give us the reason they decide against moving to Walker County, but we market our county and are contacted every day by some industry. nonattainment increases cost because of higher power costs, additional li-censing fees, and associated expenses that take Walker County out of the competition. We have a superior marketing specialist that works very hard to get the attention of those industries wanting to relocate. She knows every incentive that is possible to use, and has great contacts with support industries to help prospects partner with local business to reduce their cost. We hear every day she is one of the very best in all of Georgia. Still, we cannot offer attainment status, and that makes the difference in success and failure.

There is a nonattainment question on most Requests for Information with TVA-Industrial sites. We must assume it makes a difference in cost, time, and transferring credits, or it would not appear on most things associated with prospective in-

Walker County is a prime location for support industry for automotive manufacturers that Chattanooga is working diligently to bring to their new 1,200-acre industrial park. We have already lost a small Tier 2 supplier with powder coating paint business (eco-painter) because nonattainment has priced Walker County out of that

Question 2. Revising the particulate matter air quality standards will increase energy prices. How would higher energy prices impact businesses and families, espe-

cially the poor and those on fixed income, such as the elderly?

Response. Higher energy prices will adversely affect our entire economy, much more so than the higher cost of gasoline. Hospitals will experience more indigent patients as people with marginal incomes find themselves needing hospitalization, increasing government's cost. Power in our area has already increased twice recently because of additional costs to TVA and Georgia Power from nonattainment

The higher cost of doing business has sent textiles out of our country. Ronile, National Spinning, Apollo Knitwear, Sunrise Hosiery Mills, Coats American (cotton mill), Barwick Mills, Barwick Archer Plant, and Rossville Mills are all textile mills that have closed in Walker County. Those industries that have downsized are: United Synthetics and Cardinal Equipment.

The increased cost of power impacted the county's budget and the ability of the citizens to pay their taxes. They don't have the money to buy groceries or pay for healthcare. It often places senior citizens in a position of not being able to pay for their essentials and their medication, too. It has also cost industry to spend more money on scrubbers and monitors. To raise their prices will put them out of busi-

The increased cost of energy burdens the schools' ability to pay their debts. Since the schools collect the lion's share of property taxes, it raises everyone's property taxes because of the need to assess the whole tax base.

nonattainment impacts our county because we must get permission from the Metropolitan Planning Organization to pave a Walker County road. The cost of asphalt has gone from \$22.00 a ton in the year 2000 to \$90.00 a ton in 2006. That cost plus the requirement of permission from the region to pave the county's roads surely cur-

tails a county's ability to make visible progress in communities.

Air quality standards have increased the cost of doing business for everyone, and it has also cost people their jobs. That increases the need for family and children's welfare services and they have doubled their caseload.

Question 3. I know you care about public health, and everyone wants to see our communities meet Federal clean air standards—but a community's total well-being also is impacted by having well-paying, stable jobs, and a robust tax base. How would a nonattainment designation impact this aspect of community health?

Response. I care about public health and about the well being of my community. Employment and the availability of good jobs are key to good public health. I know the impact of having well-paying, stable jobs also indicates those working families will tend to have adequate health insurance coverage, so that if a member of their family gets sick or hurt, they can be confident that family member will receive proper treatment in a timely manner.

Of course, dirty air can affect the health of that community, but Walker County has not experienced any health issues related to air quality and we have never had

complaints from any citizen with regard to the quality of the air affecting their health. I personally have asthma, but my flare-ups are caused from pollen, mold, and animal dander allergies. I breathe easier in Walker County than in Washington, DC

Hospitals operate on the financial edge now, and with a disproportionate number of indigent patients, they will again find it necessary to increase their charges for

services, which in turn increases insurance premiums.

I am, at present, trying to establish a community health facility in an abandoned health department in Rossville to accommodate the poor, indigent, and uninsured that need medical and dental care they cannot afford elsewhere. To do this, we need equipment, supplies, and materials to complete the extensive work that must be done to prepare this building for treating patients. This is a desperately needed facility, but if nonattainment in the north end of the county prevents Walker County from getting this facility completed through additional cost and the inability to get the parking lot paved, it will be counterproductive to all concerned.

If the jobs go elsewhere because our county cannot offer a cost-effective environ-ment, unemployment will prevail and the county's tax base will suffer. Taxes pay

for services that are essential to the quality of life as we know it.

Question 4. I am concerned that EPA has proposed to "move the goalposts" by establishing new standards even before States send in their compliance programs to meet the existing standards. What will the impact be on States and localities and

their planning resources?

Response. Counties in Region I Georgia and the metropolitan area of Chattanooga are just now moving forward with compliance for PM2.5. To raise the bar when the current requirements are already out of our reach sets us up for failure. Air quality standards decidedly increase the cost of doing business and may even take them out of the competitive process. The power companies, having to spend billions on processes to clean the air raises the rates for all-counties, communities and individuals. For counties, it causes the dreaded tax increases.

We have complied with all the requirements for nonattainment, and yet we have fine particulate matter coming from wildfires in Canada and Alaska, agricultural burns in Kansas, and dust from Africa, to name just a few of the many pollution sources over which we have no control. We have met all the requirements of EPD with regard to the vapor recovery and burn ban that was expected of us. I don't know how we can meet a more stringent standard than the one we are now struggling to meet. We are an emerging community with a lot of promise. nonattainment can take that promise down the drain by pricing existing industries out of business, and limiting new business while we watch the existing industry relocate to a more sustainable environmental standard.

If this new standard does, in fact, become the new requirement, all across this Nation we may see manufacturing leave this country and go where there are no controls. This new standard will ultimately increase cost to every single American. The governing authorities will find they have less and less with which to plan and deliver services. Ultimately, while our air might be cleaner if it is in our control to make it so, our quality of life will still become less desirable because cost will put many things we now enjoy out of our reach.

Without the ability to comply with the new standards, State and Federal funding

will be withheld from local governments causing them to sink into counter-productive development instead of the bright, promising future we have planned.

Thank you for your consideration of the problems, and your willingness to find solutions to help the communities of this Nation with the economic constraints of nonattainment.

STATEMENT OF HARRY C. ALFORD, PRESIDENT AND CEO, NATIONAL BLACK CHAMBER OF COMMERCE

The National Black Chamber of Commerce (NBCC) with offices located at 1350 Connecticut Aye., NW, Suite 405, Washington, DC. is a non-profit, non-sectarian organization dedicated to economically empowering and sustaining African American communities through entrepreneurship and capitalistic activity within the United States and via interaction with the Black Diaspora.

The NBCC has one hundred and ninety (190) affiliated chapters locally based throughout the Nation as well as international affiliate chapters based in the Bahamas, Brazil, Colombia, Ghana and Jamaica and businesses as well as individuals who may have chose to be direct members with the national office.

The 1 million African American businesses in the United States represent sales of more than \$100 billion annually and maintain an annual spending base of over \$800 billion. The NBCC has harnessed much of the power of these dollars and provides unique opportunities for corporations and African American businesses to

partner in creating greater opportunity for all people.

The NBCC represents 95,000 Black-owned businesses and provides education/advocacy that reaches all 1 million Black-owned businesses across the Nation. Moreover, the NBCC is on the leading edge of educating and training Black communities on the need to participate vigorously in this great capitalistic society known as America.

The NBCC appreciates the opportunity to offer its views on the Environmental Protection Agency's (EPA) proposed rule to establish a more stringent National Ambient Air Quality Standard (NAAQS) for particulate matter (Docket No. EPA-HQ-OAR-2001-0017).

The National Black Chamber of Commerce has historically supported the efforts of the EPA to protect the public health of all Americans. The Clean Air Act and its regulatory structure, while controversial over the years, has been the principal driving force behind the improvements in our Nation's air quality and the reduction of harmful air pollutants. The NBCC also understands that despite this progress much work remains to be done to achieve our Nation's air quality goals.

In that spirit, the NBCC continues to support EPA's efforts to control sources of pollution and the promulgation of regulations that are both cost-effective and based on sound science. As a regulated community, we can not tolerate regulation for the sake of regulation and the attendant economic costs of such policies. The regulate and punish mentality must be abandoned so that we may address our environ-

mental challenges while sustaining a strong economy.

In that regard, the NBCC is concerned that the current EPA proposed rule to further establish a new NAAQS for urban particulate matter and to establish a more stringent PM_{2.5} standard is not supported by current science and if adopted, could have an enormous adverse impact on small businesses and in particular, Blackowned businesses represented by the NBCC that are engaged in a broad cross section of economic activity in the manufacturing, industrial and service sectors of the economy.

Small and medium business alike are today facing a number of challenges not the least of which are higher interest rates that are putting pressure on inventory financing and higher energy and related operating costs that are eroding margins and placing pressure on maintaining current employment levels. The imposition of new regulations on industry, manufacturing and other sectors, in the absence of scientific evidence of a demonstrable health benefit is simply not justified. These new standards would likely result in further increased energy prices, especially that of natural gas, a key energy input in urban areas.

Beyond this, given the lack of scientific justification, the NBCC is concerned about the impact of the proposed rule as a result of the expanded number of nonattain-

ment designations under the Clean Air Act.

It is well documented that a "nonattainment" designation under the Clean Air Act can carry with it serious economic and social repercussions for the geographic area so designated which produce immediate and direct impacts on major sources in and near the nonattainment areas with attendant indirect impacts on small and medium businesses and consumers as well, especially those on low and fixed incomes in terms of jobs and energy costs.

Restrictive permitting requirements for companies that add new units or make major modifications to their facility are competitively disadvantage as such requirements would not apply to similar facilities operating in attainment areas. Again, these restrictions would significantly impact urban areas. Also, nonattainment areas face the risk losing Federal highway funding that is vitally important to urban redevelopment.

In addition, companies that build a new facility or that perform a major modification to certain existing facilities in or near a nonattainment area would be required to install the most effective emission reduction technology without consideration of cost.

Moreover, new emissions in the area must be offset. Thus, if there is no party willing to provide the offset, then the project resulting in increased emissions of the

given pollutant cannot go forward.

Take the Mercedes plant in Alabama, for instance. Our Birmingham chapter was so excited that the original plan was to put the plant inside the Birmingham city limits. Gas stations, restaurants, hotels, etc., would have benefited significantly. Due to attainment levels, the plant was moved 90 miles to the south in rural Alabama. It devastated the expectations and growth opportunities for the largest city in Alabama.

The same scenario happened in Indiana with the Isuzu plant that was destined for Indianapolis, but ended up 70 miles north in Lafayette. We have about 250 members in the Indianapolis chapter and 2 in Lafayette. The impact was obvious.

As illustrated by these examples, the loss of industry and economic development in and around an area could be significant because a company interested in building a facility that emits the given pollutant will probably not build that facility in a nonattainment area due to the increased costs associated with restrictive and expensive permit requirements.

This again would result in jobs moving away from urban areas—with existing infrastructure and excellent redevelopment opportunities—into rural "Greenfield" sites that require new infrastructure be built from the ground up. This harms

Brownfields and other urban redevelopment programs.

In conclusion, the NBCC is concerned that the increased costs of goods and services such as energy, and the potential for decreasing disposable incomes and loss of jobs and economic activity as a result of this proposed regulation will adversely impact Black-owned and other small and medium businesses and inadvertently harm the socio-economic status of individuals and, thereby, is not in the public interest in the absence of sound scientific justification and demonstrable health bene-

Accordingly, for the reasons stated herein, the National Black Chamber of Commerce believes the EPA should decline to promulgate its proposed "Urban Only" standard for coarse particulate matter, and should retain the current standards for fine particulate matter.

RESPONSE BY HARRY C. ALFORD TO AN ADDITIONAL QUESTION FROM SENATOR VOINOVICH

Question. I understand that many companies seeking to build new facilities will stay away from nonattainment areas and instead go to attainment areas. Please explain the impact this has on sending development away from existing infrastructure in nonattainment areas and out to "Greenfields" where infrastructure must be built.

Response. The easiest examples are the major auto plants that are being built in "Greenfield's" in the South. A major auto facility is placed outside Anniston, Alabama versus the metropolitan areas of Birmingham or Atlanta. That plant brought thousands of jobs to the Anniston area by itself. Suppliers and distributors subsequently placed operations close to that plant which created more jobs and economic vitality. Demands on housing, schools, retail, hotel, travel, etc. created an economic boom to the Anniston area. Many of those workers left or moved away from Birmingham and Atlanta. They shifted their tax base, consumable dollars and all other capitalistic activity from two nonattainment areas to one "Greenfield". This has a serious impact on the NBCC constituency. It drives down the quality of life and strips the economic vitality of most urban areas within the United States.

STATEMENT OF WILLIAM F. CHRISTOPHER, EXECUTIVE VICE PRESIDENT AND GROUP PRESIDENT, AEROSPACE, AUTOMOTIVE AND COMMERCIAL TRANSPORTATION, ALCOA

INTRODUCTION

Mr. Chairman, Members of the subcommittee, thank you for the opportunity to appear before you today to discuss our concerns in response to the Environmental Protection Agency's (EPA) Proposed National Ambient Air Quality Standards (NAAQS) for Particulate Matter (PM).

My name is Bill Christopher. I am the Group President of Aerospace, Automotive and Commercial Transportation for Alcoa and also hold the position of Executive Vice President. With over 131,000 employees in 43 countries, Alcoa is the world's leading producer of primary aluminum, fabricated aluminum and alumina and is a large manufacturer of packaging, transportation and other industrial products. Alcoa holds sustainability as a core value in our business practices. We include goals and metrics for sustainability as key elements of our 2020 Vision for the company. Consequently in 2005, Alcoa was named one the world's three most sustainable corporations by the World Economic Forum.

Our core values related to sustainability have been clearly demonstrated at our Cleveland Works where we have taken significant steps to promote cleaner air, cleaner water, and better use of land in our production processes. We are a major employer in the Cleveland area, with 1,400 employees working at our three facilities in Northeast Ohio producing goods valued at nearly \$1 billion for domestic and

international markets.

I also serve on the Board of Directors of the Greater Cleveland Partnership (GCP) and appear before you today on their behalf. The GCP is one of the Nation's largest metropolitan chambers of commerce, representing more than 16,000 small-, mid-sized and large companies. Because of concern for the region's economy, the GCP has asked me to provide leadership in efforts to shape business community involvement in clean air compliance discussions.

I understand that you will hear from witnesses in other hearings about the need to base air quality base standards on current and sound science. We agree with this assessment, particularly in the case of fine particulate emissions where the science appears to be somewhat limited in terms of understanding sources and dispersion patterns, and there is only a very recent history of monitoring. However, my message today will focus on the economic impact of imposing standards that are difficult, if not impossible to attain in the short-term. Here are the key points I would like to share with you today:

like to share with you today:

First, I am not here to debate the value of vigorous efforts to achieve cleaner air. There is absolutely no doubt that cleaner air is central to the future health of our residents and overall quality of life. Both my company and the Cleveland business community have demonstrated their commitment to continuous improvement of the region's air quality. As is the case elsewhere, these efforts are working—our air quality is improving, and will continue to do so as a result of good faith efforts to meet current regulations.

Second, and equally important, our efforts to achieve cleaner air must achieve a delicate balance. They must take into account the potentially significant economic costs to places like Cleveland that are in the midst of painful economic transitions.

Third, achieving this balance is complicated because the timelines for meeting the Clean Air Act standards are misaligned with the timelines for several federal standards established to regulate emissions in particular industries. The gaps created by these misalignments add economic costs of compliance that could be devastating in places that rely on manufacturing as a key element of their economies.

Fourth, before any new regulations are adopted, regions like Cleveland should be given adequate time to understand the costs of proposed standards and develop strategies that reflect the needed balance. New modeling capabilities, perhaps developed and tested in Northeast Ohio with the assistance of the Federal Government, can help in this critical task.

I will briefly amplify each of these four points and I will be glad to discuss them further during the questioning.

1. Current Situation: Air Quality is Improving

Air quality continues to improve under existing regulations, a clear demonstration of the Nation's efforts to make important changes to respond to the environmental realities we face. According to the EPA, total emissions of the six principal pollutants decreased by 51 percent between 1970 and 2003 while the gross domestic product increased by 176 percent, vehicle miles traveled increased 155 percent, energy consumption increased 45 percent, and U.S. population grew by 39 percent. Through this growth, however, ozone pollution has decreased 22 percent since the early 1980s and PM levels have fallen 17 percent since 1993. My point is this: progress is being made in every part of our Nation.

Northeast Ohio has shared in this progress. Since 1995 VOC emissions have been reduced 48 percent, NOx emissions are down an estimated 30 percent resulting in a 50 percent reduction in ozone exceedence days. However, challenges remain. In 2005, Northeast Ohio was designated as a nonattainment area for the current annual fine particulate matter—following the finding of nonattainment for ozone standards in 2004. We have been advised that our region will have serious difficulty reaching compliance for the annual fine particulate standard established in 2004 and later upheld in court. Consequently, substantial work is underway by the Ohio EPA, regional agencies, local business and industry, and others to identify both the options to attain these standards and the potential economic impact. All these efforts are focused on the aggressive steps required to be in compliance and quantifying the impact secondly. We are working with the Northeast Ohio Areawide Coordinating Agency (NOACA) in the development of Ohio's State Implementation Plan for ozone compliance and will also participate in the fine particulate process, We are reaching out to more than 60 local manufacturing companies to educate them about this situation and ask for their assistance in developing innovative and progressive solutions. However, since an estimated 60 percent of Northeast Ohio's pollutants come from outside our region, neither our sincere voluntary efforts nor regulatory action imposed on our region alone will bring us into compliance.

2. Balanced Approach is Required

While your job is to find a balanced solution for the Nation, permit me to paint a picture of one city and the impact of addressing nonattainment. Receiving another nonattainment designation and the associated restrictions, could be devastating to slow growth areas like Cleveland that are struggling to shift from a heavy manufacturing economy to a more diversified one based on financial services, health care, new technology ventures and advanced manufacturing. Economic growth in the region has been about half that of the Nation for the past three decades.

A recent study completed by NERA Economic Consulting estimates a loss of more

than 12,000 jobs in the Cleveland area, a \$1.4 billion loss in Gross Regional Product (GRP), the loss of \$1.1 billion dollars of disposable personal income, and a population loss of 16,000—if the Cleveland region is forced to comply with the 8-hourozone regulation by 2010 as presently required. This study assumes the current gaps identified beyond recommended implementation plans can be physically closed with current available technologies—a major assumption yet to be validated. The loss of related tax revenues would, in turn, lead to fewer resources available to the public sector to support our much needed economic transition. Although we can not know the precise economic impacts, we are working to validate the basis of this study's assumptions. However, we know that a more stringent particulate matter standard will directly increase the cost of energy and transportation and would restrict any industry or business growth. The cost of manufacturing in the region will increase and be non-competitive, causing limited investment to sustain current operations. Finally, much of the increased costs will move directly to consumers in the form of higher energy for both transportation and home use.

A new fine particulate standard could lead to another regional emissions strategy, such as the Clean Air Interstate Rule (CAIR). This costly measure will result in increased electricity rates and could result in fuel switching away from coal to natural

gas to generate electricity, further driving up the cost of natural gas.2

In sum, the measures to achieve compliance to current standards by 2010 will have significant economic impact on the region. They also have the potential for unintended consequences such as higher energy costs, unemployment caused by the cost of regulatory burden shifted to businesses, as well as a direct impact on those individuals who are already having difficulty making ends meet, the poor and elder-

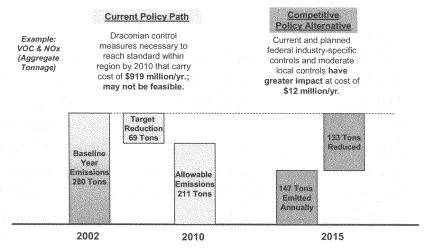
3. Misalignments Must Be Addressed

The principal driver of the economic impact is the steps required to bridge the difference between the clean air standards and federally mandated industry specific regulations. Eighty percent of ozone emissions in the region are from motor vehicles and power generating plants. Sixty percent of these emissions come from outside the northeast Ohio. Federal regulations on diesel engine standards, coal fired powerplants, and other industries will have a significant long-term impact on ozone and fine particulate emissions. These will result in long-term solutions that enable the northeast Ohio region to meet the new clean air standards on a sustainable and economically efficient basis. [Reference Graphic Below]

¹NERA Economic Consulting, "Economic Impact of Attaining the 8-Hour Ozone Standard: Cleveland Case Study", Prepared for American Petroleum Institute, Oct. 2005

² Analysis by National Association of Manufacturers indicates that since 2000, the State of Ohio has lost nearly 200,000 manufacturing jobs, a decline from 1,021,000 to 823,400, due in large part to regulatory compliance and increased energy costs. Nationwide, the United States has lost more than 3.1 million manufacturing jobs, because of the same reasons cited above. These job losses, incidentally, coincide with the steep climb in natural gas costs, which have resulted in increased demand due in large part to compliance with the NAAQS.

Misalignments in implementation deadlines create gaps that carry substantial costs to Cleveland



However, the timing of these regulations is such that the major impacts will occur

However, the timing of these regulations is such that the major impacts will occur in the 2010 to 2015 timeframe. As a result, compliance with current clean air standards by 2010 will require costly incremental actions. These actions must be especially aggressive as only the 40 percent of the locally generated emissions will be available to achieve compliance.

According to the National Association of Manufacturers, pollution abatement costs in the United States are equivalent to 1.6 percent of the GDP in the United States. The cost of abating manufacturing pollution as a percentage of manufacturing output is 7.6 percent in the United States. To put this figure in perspective, the cost in Japan is 3.1 percent, in Germany 5.2 percent, in Great Britain 4.7 percent, in Mexico 3.1 percent, and in China 1.6 percent.

Mexico 3.1 percent, and in China 1.6 percent.³

The stigma of sustained designation as a non-compliance region will have impact on residential and economic growth, in spite of significant improvements in air quality. This chronic condition will create an environment of uncertainty and significant cost that will accelerate the flight of private capital from the region—and most likely entirely out of the country. Companies looking to locate facilities or expand capacity will not even consider communities in nonattainment. We will lose jobs. We will lose entire companies—probably to other countries.

4. Addressing Complexity Requires More Time and Better Modeling

The NERA study I mentioned earlier estimated that deferring the compliance date for ozone from the presently required 2010 to 2015 to allow realization of emission reductions from national regulations already in place, would reduce the cost of controls from \$919 million for 2010 to \$12 million for 2015. They also estimate reductions in the projected loss of Cleveland's GRP from \$1.4 billion to \$20 million for 2015 to \$20 million for 2015. and in the job loss from 12,000 to 100. If these numbers are even 50 percent accurate, then great care must be taken not to create similar implementation gaps by adopting any new fine particulate standards.

Compliance with a more stringent fine particulate standard—in the face of standards misalignment and indeterminate science—before we have even had the opportunity to adequately address the challenges of the current SIP processes —may be physically impossible, if not economically devastating.

I again must emphasize that achieving cleaner air is a goal we all actively support the process that achieving cleaner air is a goal we all actively support the process of the proce

port. However, we urge the Federal Government to move forward with great caution. We ask that you provide regions like Cleveland with adequate time and resources to find a balanced approach that enables us to address these increasingly complex air quality challenges in ways that minimize damage to our economy. Incre-

³December 2003 study by the National Association of Manufacturers, based on data collected by the Organization for Economic Cooperation and Development.

mental responses with compliance timelines that are not in synch with national industry regulations, such as those aimed at achieving compliance on ozone and fine particulate matter standards, are likely to create huge costs in the short-term and leave our region in a state of non-compliance for decades to come. We respectfully ask that you urge the EPA Administrator to defer action to change the 24-hour fine particulate matter standard at this time and assist Northeast Ohio with evaluating the impact of meeting the current standards.

RESPONSE BY WILLIAM CHRISTOPHER TO AN ADDITIONAL QUESTION FROM SENATOR VOINOVICH

Question. Energy prices are impacting businesses' ability to compete in the global marketplace, and revising the particulate matter standards will increase energy costs. How would higher energy prices and higher natural gas prices impact your business and the local economies that you operate in? Also, since Alcoa is a global entity, what kind of disadvantage does this give to companies trying to operate in the United States and compete?

Response. Competitive energy prices are critical to Alcoa's ability to succeed in both U.S. and global markets. In particular, electricity prices for our primary aluminum smelters are a major factor in the business because that component represents 25 percent of the cost to make one pound of metal. We continue to seek competitive electricity sources around the world and for our existing smelters in the United States. Primary aluminum production is a global business and energy prices will continue to be a major factor in determining where new as well as sustaining investments will be made. Over time, countries with uncompetitive energy prices will tend to see a decline in investments, particularly in primary production facilities.

Likewise, high natural gas prices are a concern, particularly for our fabricating facilities where it is used in heat treatment processes, for example. Increased gas prices have a significant effect on our profitability which, in turn, will help to determine our ability to make future investments in those plants.

mine our ability to make future investments in those plants.

In summary, energy prices in the United States that are not competitive with prices in other countries will have a negative impact on our domestic locations.

BEFORE THE SUBCOMMITTEE ON CLEAN AIR, CLIMATE CHANGE, AND NUCLEAR SAFETY

ENVIRONMENT AND PUBLIC WORKS COMMITTEE, UNITED STATES SENATE

HEARINGS ON THE ENVIRONMENTAL PROTECTION AGENCY'S PROPOSED REVISIONS TO THE PARTICULATE MATTER AIR QUALITY STANDARDS

TESTIMONY OF CONRAD G. SCHNEIDER ADVOCACY DIRECTOR, CLEAN AIR TASK FORCE Mr. Chairman and distinguished members of the Subcommittee,

Introduction

My name is Conrad Schneider, and I am the Advocacy Director of the Clean Air Task Force, a nonprofit organization dedicated to restoring clean air and health environments through scientific research, public education and legal advocacy. The Task Force appreciates the opportunity to appear before you today and offer our views on the United States Environmental Protection Agency's proposed revisions to the particulate matter air quality standards. \(^1\)

Overview

- 1. Further reductions in fine particulate pollution (PM_{2.5}) are a matter of life and death for tens of thousands of Americans each year.
- 2. The proposed revisions to the particulate matter standards, while an improvement over the current standards, do no go far enough in protecting human health. EPA should tighten its proposed particulate matter standards to protect public health with an adequate margin of safety by tightening both the annual and daily particulate matter standard and setting a coarse particle standard. Tightening the annual and daily PM_{2.5} standards could save as many as 10,000 additional lives per year. Certainly, EPA cannot justify adopting standards any less stringent than those recommended by its own independent Clean Air Science Advisory Committee (CASAC).
- 3. While the issues of cost and implementation are outside the scope of EPA's review of the ambient air quality standard, the Subcommittee should note that the current and proposed PM_{2.5} standards are achievable, cost-benefit justified, and can be met with affordable, available technologies that will not damage America's economic vitality or the economic health of the sectors of the economy that must take primary responsibility for the needed reductions.
- 4. For better or worse, the regulatory impact of any new particulate matter standards will be far into the future. Once the new particulate matter standards are finalized, designations will not be made until 2010. Initial attainment plans will be due in 2013 with the first deadline for attainment not until 2015 with the possibility of a five-year extension until 2020 and two one-year extensions thereafter.
- 5. It is premature to conclude that the proposed new particulate matter standards will be difficult or impossible to achieve, however, EPA and the states need to focus on the needed suite of federal control measures and potential model state programs to ensure timely attainment is achieved.

¹ EPA, National Ambient Air Quality Standards; Proposed Rule 40 C.F.R. Part 50 p. 2620 January 27, 2006 available online at: www.epa.gov/fedrgstr/EPA-AIR/2006/January/Day-17/a177.pdf

We know enough today to know that a cost-effective program for attainment of the existing and proposed PM_{2.5} standards² would include:

- (A) EPA setting a tighter national or regional cap on sulfur dioxide from power plants;
- (B) States requiring tighter sulfur dioxide controls on power plants that have a significant impact on nearby nonattainment areas;
- (C) EPA completing the process of tightening emission standards for new locomotive and marine diesel engines and issuing regulations that require existing, on-road diesel engines meet tighter emission standards when they are rebuilt; and
- (D) States and local governments requiring additional PM_{2.5} reductions from public and private diesel fleets.
- 6. Senators Carper and Voinovich in the legislation they are pursuing, the Clean Air Planning Act of 2006³ and funding for the Diesel Emission Reduction Act of 2005⁴, are taking exactly the right approach focused on the power industry and America's diesel fleets as the largest contributors to the problem, and the most cost-effective contributors to the solution.
- 7. U.S. EPA through its Clean Air Interstate Rule (CAIR) and the new on and non-road diesel engine rules has taken two important steps in reducing PM_{2.5} pollution. But, the reductions from CAIR will provide "too little, too late" to provide states the reductions they need from the power sector to meet their attainment obligations on time.
- 8. U.S. EPA in the CAIR rule has tied the hands of the states by making obtaining additional power plant reductions beyond CAIR more difficult than necessary. By providing strong disincentives for states seeking the most cost-effective incremental PM_{2.5} reductions (i.e., additional SO2 reductions from power plants), this "special treatment" afforded the power sector is forcing states to turn to more expensive, less cost-effective sources (industrial point sources and small businesses, etc.) for the needed PM_{2.5} reductions.
- 9. Congress should leave alone the existing statutory and regulatory process for setting and revising National Ambient Air Quality Standards (NAAQS). The current standard-setting provides an excellent example of what we all should want, namely science-driven policy. Instead of altering the process, EPA should be urged to better respect the statutory deadlines for proposing revisions and raise the priority it gives timely implementation of the standards. If it takes any action at all on PM2.5 implementation, Congress should fully restore funding for the states' air grant program in the current EPA appropriations bill and ensure that states have the necessary resources to

² Excepting California which has adopted a 12 ug/m3 annual PM standard which the California Air Resources Board recognizes will require a suite of reductions, including in the automotive and port emissions sectors, in order to attain.

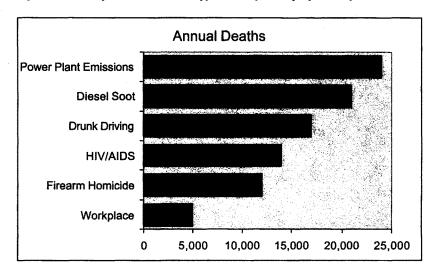
³ The Clean Air Planning Act of 2006, S. 2724.

⁴ The Diesel Emissions Reduction Act of 2005, S. 1265.

submit adequate State Implementation Plans (SIPs) that will allow them to attain the existing and new PM_{2.5} standards on time.

A. Particulate Matter is a Matter of Life and Death

From the perspective of human health, particulate matter is the most important pollutant that is regulated by the U.S. EPA, period. Unlike any other pollutant, particulate matter cuts short the lives of tens of thousands of Americans each year. Estimates by EPA's leading air programs benefits consulting firm, Abt Associates, have found that PM_{2.5} from power plants and diesel engines together lead to the premature deaths of nearly 45,000 Americans each year. In Ohio alone, diesel and power plant pollution is responsible for the premature deaths of approximately 2,500 people each year.



The mortality risk from power plant and diesel particulate matter exceeds that from drunk driving and AIDS combined. In terms of human health impacts, particulate matter represents a threat that is an order of magnitude greater than any other risk that EPA regulates or that this Subcommittee oversees. PM_{2.5} poses a greater health threat than that posed by ozone, radon, dioxin, PCBs, or mercury. Diesel exhaust alone poses a greater cancer risk than all the 133 other air toxics that EPA tracks in its National Air Toxics Assessment database.⁵ In polluted cities, the mortality risk of breathing the levels of fine particles in the ambient air is comparable to the risk posed by living with a

⁵ Clean Air Task Force, "Diesel and Health in America: The Lingering Threat," February 2005 available online at: http://www.catf.us/publications/reports/Diesel_Health_in_America.pdf

smoker.⁶ In terms of environmental health priorities, setting and achieving protective particulate matter standards should be Job #1 for EPA.

B. The Proposed Revision to the Particulate Matter Standards Fails to Protect Public Health with an Adequate Margin of Safety

Scores of peer-reviewed, published health studies since 1997 have demonstrated, and EPA has acknowledged, that the current standards provide inadequate protection for those who live in areas even with moderate levels of particulate matter. The Clean Air Task Force estimates there is a difference of as many as 10,000 avoidable deaths in meeting an annual standard of 12 ug/m3 or 14 ug/m3 (17,900 and 10,100 avoided deaths, respectively) relative to the current 15 ug/m3 annual standard (7,400 avoidable deaths).

Under the Clean Air Act, primary standards must protect public health, including the health of sensitive populations, with an adequate margin of safety. Secondary standards must protect public welfare, including important adverse effects such as visibility impairment and damage to materials and crops. The current EPA proposed revisions to the particulate matter standards fail on both counts.

The adverse health effects of particulate matter are serious and have been well documented in EPA's Criteria Document and Staff Paper. The thousands of studies published over the last nine years make a much stronger case for the regulation of fine particles than in 1997, and indicate that the current standards must be lowered to protect public health.

Community health studies have consistently demonstrated associations between daily increases in fine particles and decreased lung function, exacerbation of asthma, more frequent emergency department visits, increased risk of heart attacks and strokes, additional hospital admissions, and increased number of daily deaths. These effects have been demonstrated in cities where the daily concentrations of PM2.5 are well below the current standard and rarely reach the level of the proposed 24-hour standard. Furthermore, the form of the proposed standard excludes too many of the most polluted days from compliance determinations.

Long term exposures to fine particles are implicated in premature death from heart disease, lung disease, and lung cancer. The average number of life-years lost by individuals dying prematurely from exposure to particulate matter is 14 years. EPA's risk assessment demonstrates that thousands of premature deaths attributable to particulate air pollution are occurring each year under the current standard, and that the proposed standards would do little to reduce this toll.

Building on earlier work, the largest ever epidemiological study of the effects of PM2.5 in

⁶ NYU Press release, March 5, 2002. Most Definitive Study Yet Shows Tiny Particles in Air Are Linked to Lung Cancer; Pope, C.A, Burnett, R.T., Thun, M.J., Calle, E.E., Krewsi, D., Ito, Kaz, and Thurston, G.D., "Lung Cancer, Cardiopulmonary Mortality, and Long Term Exposure to Fine Particulate Air Pollution, Journal of the American Medical Association, Vol. 287 (2002), p. 1132-1141.

⁷ U.S. EPA, OAR, "Final Report to Congress on Benefits and Costs of the Clean Air Act, 1970 to 1990", EPA 410-R-97-002 (October 1997) at 1-23.

204 U.S. counties was published in the Journal of the American Medical Association in March 2006.8 This study showed clearly that the proposed standards for PM2.5 fail to protect public health as required by the Clean Air Act. In this study, the average of the county mean annual values was 13.4 μg/ms—well below the proposed standard of 15 μg/ms. At levels below what EPA proposed as an annual standard, the findings showed cardiovascular and respiratory hospital admissions for the elderly increasing as concentrations PM2.5 increased. Significant associations with excess cardiac and respiratory admissions persisted even after excluding all days above 35 μ g/m (the level of the proposed daily standard) from the study. Even where PM2.5 concentrations met both the proposed annual and 24-hour standards, serious health effects occurred.

Furthermore, a follow-up to the Harvard Six Cities Study published in March 2006 documented the life-saving benefits from reduced particulate levels. That study found that an average of three percent fewer people died for every reduction of one µg/ms in the annual average levels of PM2.5.10 In fact, the lead researcher said that the reductions in particulate matter in the U.S. that have taken place during the study period are saving the lives of 75,000 Americans each year. 11

According to EPA's Children's Health Protection Advisory Committee, the proposed annual PM2.5 standard does not provide the required adequate margin of safety to protect infants and children. The Committee concluded that the proposed daily PM2.5 standard must also be revised downward to protect public health. ¹² The Clean Air Scientific Advisory Committee to the EPA has indicated that PM2.5 causes adverse health effects including premature death at annual concentrations below the current standard, and has reiterated its recommendations for lowering the annual standard. 13

Coarse particles are associated with increased hospitalization for respiratory infections in children, decreased lung function, increased hospital admissions for heart disease, increased hospital admissions for respiratory disease in the elderly and increased risk of premature death. EPA proposes a daily coarse particle standard that would be higher than levels where serious health effects have been reported in the studies EPA reviewed. EPA would enforce the standard only in urban areas with populations above 100,000, and exempt mining and agricultural sources of particles. EPA must set a coarse particle standard that applies nationally and without exemptions, to protect the health of all Americans as the

⁸ Dominici F, Peng RD, Bell ML, Pham L, McDermott A, Zeger SL, Samet JM. Fine Particulate Air Pollution and Hospital Admission for Cardiovascular and Respiratory Diseases. JAMA 2006; 10:1127-

⁹ Letter from Francesca Dominici to U.S. EPA, March 23, 2006. Docket ID No. EPA-HQ-OAR-2001-

¹⁰ Laden F, Schwartz J, Speizer FE, Dockery DW. Reduction in Fine Particulate Air Pollution and Mortality: Extended Follow-up of the Harvard Six Cities Study. Am J Respir Crit Care Med 2006; 173: 667-672.

11 http://www.hsph.harvard.edu/press/releases/press03152006.html

¹² Letter from Melanie A. Marty, Ph.D., Chair, EPA Children's Health Protection Advisory Committee, to Stephen L. Johnson, Administrator, U.S. Environmental Protection Agency, RE: Proposed NAAQS for Particulate Matter, March 3, 2006.

¹³ Dr. Rogene Henderson, Chair, Clean Air Scientific Advisory Committee letter to Stephen L. Johnson, Administrator, U.S. Environmental Protection Agency, March 21, 2006, Subject: Clean Air Scientific Advisory Committee Recommendations Concerning the Proposed National Ambient Air Quality Standards for Particulate Matter, EPA-CASAC-LTR-06-002.

Clean Air Act requires. Furthermore, EPA must not revoke the PM10 standard in any area of the country without providing protection against backsliding. The Children's Health Protection Advisory Committee has recommended that the level of the coarse particle standard be lowered, that standards apply nationwide, with monitoring in both urban and rural areas, and that the exemption for agriculture and mining be withdrawn. The Clean Air Scientific Advisory Committee has also opposed exempting specific industries and recommended establishment of a national coarse particle monitoring program in urban and rural areas. We have urged EPA to lower both the annual average and the 24-hour fine particle standard, while tightening the way compliance with the standards is measured.

We have urged EPA to adopt protective coarse particle standards that will apply nationwide, with monitoring in both urban and rural areas. We oppose the special exemptions for agribusiness and mining. In addition, we have said that we believe that EPA must establish secondary standards for fine particles that protect against deterioration of visibility caused by fine particle pollution, as recommended by the Clean Air Scientific Advisory Committee, and set secondary standards for coarse particles that apply nationwide to protect against the ecosystem damage and visibility degradation they cause.

C. Tightening the PM_{2.5} Standards will not Result in Broad Swaths of the U.S. Being Designated in Nonattainment

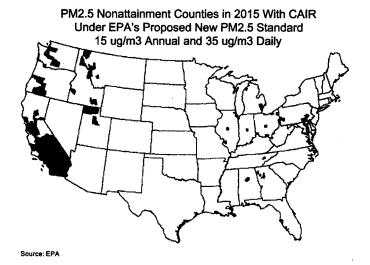
Critics of tighter PM_{2.5} standards have warned that if the standards are tightened, hundreds of U.S. counties will be branded with the stigma of nonattainment. However, in making these claims, these critics have conveniently ignored the benefits of the CAIR rule in the East.

Here is a map showing the counties that currently are monitoring nonattainment:

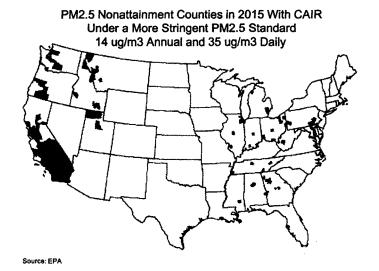
Source: FPA

PM2.5 Nonattainment Counties (1999-2003 Design Values) Under Current EPA Standards

EPA has proposed retaining the current annual PM_{2.5} standard and tightening the daily standard to 35 ug/m3. Here is a map of the counties that would be in nonattainment on the first statutorily-required attainment date, 2015, with the CAIR rule:



You can see that even with the proposed tighter daily standard, with the CAIR rule fewer counties are in nonattainment in 2015 than are in nonattainment today. Even if the annual standard was tightened from 15 ug/m3 to 14 ug/m3, although some western counties would violate the new standard, the number of nonattainment counties post-CAIR does not grow significantly. See map below:



D. Protective PM_{2.5} Standards are Achievable with currently available, affordable technology

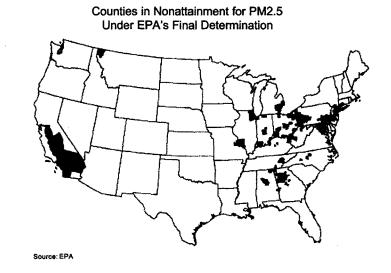
EPA Should Establish Tighter National and Regional Caps on Power Plant Sulfur Dioxide and Nitrogen Dioxide

Fortunately, the solutions to the problem of PM_{2.5} pollution are well-understood and achievable today with available, affordable technology. ¹⁴ The biggest single contributor to the problem of PM_{2.5} is sulfur dioxide emissions from coal-fired power plants which convert to particulate matter through photochemical changes in the atmosphere. The U.S. power sector currently emits over 10 million tons of sulfur dioxide each year. Sulfur dioxide emissions from power plant boilers can be reduced by 90-95 percent through the installation of Flue Gas Desulfurization (FGD) devices commonly known as "scrubbers". Power plant nitrogen oxides can be cut by over 80 percent by application of Selective Catalytic Reduction (SCR) technology. While installing these controls constitutes a major capital investment for their owners, EPA in its recent CAIR rule RIA estimates that FGD devices can reduce SO2 for less than \$2000/ton and SCR can reduce NOx for less than \$1000/ton. These installations on power plants represent the "low-hanging" fruit for PM_{2.5} control because there are no more cost-effective reductions available than these.

¹⁴ The State and Territorial Air Pollution Program Administrators and the Association of Local Air Pollution Control Officials (STAPPA/ALAPCO) recently issued "Controlling Fine Particulate Matter Under the Clean Air Act: A Menu of Options" (March 2006) that identifies the many feasible controls that are available for reducing particulate matter emissions. Available online at: http://www.4cleanair.org/PM25Menu-Final.pdf

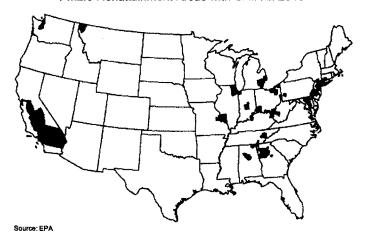
EPA's Clean Air Interstate Rule (CAIR) requires a 60+ percent cut in SO2 and NOx emissions from power plants in the Eastern U.S. by 2015 [although EPA predicts that the banking feature of the program will mean that this level of reduction will not actually be achieved in any given year before 2020]. While the CAIR rule reductions represent an important step forward in PM_{2.5} control, the cuts come too late to afford states the interstate transport pollution reductions they need by the 2010 attainment date of the current standard. Indeed, the CAIR rule still leaves over 78 million Americans living in areas that violate the current standards for PM_{2.5}. EPA should have required deeper, faster cuts from the power sector as part of this rule to help the states attain the standard on time. The rule could have produced highly cost-effective reductions of at least one million more tons of SO2. In addition, by EPA's own admission, under CAIR 21 percent of the nation's coal plants still would not have basic sulfur scrubber technology even by 2020.

The map below shows EPA's final designations for PM_{2.5} nonattainment areas:

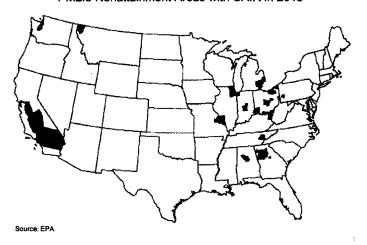


Under the Clean Air Interstate Rule, the number of areas in nonattainment in 2010 and 2015 fall dramatically. See maps below:

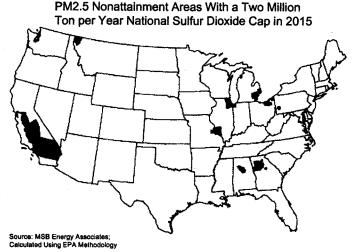
PM2.5 Nonattainment Areas with CAIR in 2010



PM2.5 Nonattainment Areas with CAIR in 2015



Nevertheless, even with the CAIR rule in 2010 14 areas will still be in nonattainment of the $PM_{2.5}$ annual standard. If a national SO2 cap of 2 million tons was set, that number would fall to 8 areas. The recently introduced Clean Air Planning Act of 2006 would set a nationwide SO2 cap of 2 million tons per year starting in 2015 with a first phase in 2010 of 4.5 million tons per year. See map below:



These residual, post-CAIR nonattainment areas include Cleveland, Chicago, Atlanta, and Detroit where targeted additional power plant and local diesel measures could make up the difference.

Besides delivering inadequate reductions in a timely fashion, the CAIR rule contains another, perhaps more egregious flaw. The CAIR rule limits the ability of states to "take a second bite at the apple" in terms of additional reductions from power plants. This is very important because, as is detailed below, additional cuts in power plant pollution are the most cost-effective additional controls that states can require (i.e., the next "lowest-hanging fruit"). By discouraging states from seeking additional reductions from the power sector beyond CAIR, EPA forces states to look to relatively more costly controls on their industrial point sources and small area sources which generally are smaller businesses.

The CAIR rule limits the states' ability to seek additional power sector reductions by placing strict rules on states' ability to participate in the regional CAIR emission trading program. As we know, the CAIR frame work derived from the "sweetheart" deal between the Bush Administration and the electric generating industry known as the "Clear Skies" legislation. CAIR follows the "Clear Skies" template in attempting to fashion a "safe harbor" for the power sector to limit additional reductions from power plants. Here's how: EPA's 2005 CAIR rulemaking requires many states across the eastern and Midwestern US to reduce emissions of NOx and SO2 between 2009-10 and 2015. EPA has promulgated "model trading rules" for states to adopt that provide for reduction of these pollutants from power plants via a regional cap and trade system. However, many states in the eastern half of the country believe that the level and timing of these power plant reductions are not sufficient to allow attainment of the ozone and PM NAAQS, and that emissions reductions from most other sources will be more costly. As a result, many

states, led by the Ozone Transport Commission, are considering requiring additional reductions from power plants in much of the CAIR region. EPA, however, has not cooperated with the states in these efforts, even though such reductions would clearly benefit public health and the environment, and are expressly authorized by Section 116 of the Clean Air Act.

Rather, EPA has discouraged states from reducing power plant emissions, especially emissions of SO2, beyond those reductions called for in CAIR. Essentially, EPA has made it easy for states to adopt CAIR, and difficult for states to go beyond CAIR. Thus, the CAIR requirements for states adopting EPA's model power plant trading rules are simpler and less onerous than the requirements for states that seek to achieve the necessary emission reductions in some other way. In addition, EPA will allow states to submit streamlined SIPs that contain the CAIR model rules; in order to take advantage of this streamlined approach, however, states can only make limited changes to EPA's CAIR approach. Importantly, the changes that EPA will accept in streamlined CAIR SIPs do not include a more stringent SO2 reduction requirement. Due to the resource constraints facing many state environmental agencies (constraints which EPA's proposed 2006 budget only makes worse), it may be quite tempting for many states to accept EPA's streamlined approach, thereby saving time and resources, even at the expense of foregoing requirements for additional emission reductions.

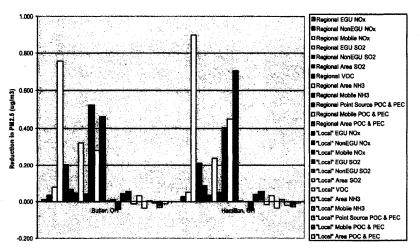
EPA has gone even further, and indicated that it will not approve state SIP submissions that include more stringent SO2 power plant limits. And, if states do not get their SIPs into EPA on time, EPA recently finalized a rule that will automatically impose on such states federal requirements that mirror EPA's CAIR model trading rule for power plants. EPA's use of a federal implementation plan (FIP) in this way is highly unusual. Historically, EPA has been extremely reluctant to issue FIPs on states that do not meet SIP submission requirements (usually EPA does so only after a court order resulting from a citizens' suit). Here, however, EPA has issued the FIP before the SIP deadline has even expired, and one of the primary effects of such a FIP is to encourage states to implement CAIR using the quickest and easiest administrative route—that is, by adopting without meaningful change the CAIR model trading rules (including CAIR emission limits and deadlines) for power plants.

2. <u>State SIPs Should Require Tighter Controls on Regional Power Plant Sulfur</u> <u>Dioxide and Nitrogen Dioxide Emissions</u>

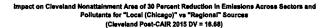
Given that the CAIR rule failed to achieve sufficient reductions from the power sector, states must consider where they will be able to find additional PM_{2.5} reductions beyond CAIR necessary to attain. Prudent policy would suggest that they will consider the most effective and cost-effective tons to pursue next. EPA's own analysis suggests that the few remaining nonattainment areas should seek additional sulfur dioxide reductions beyond CAIR from nearby upwind power plants.

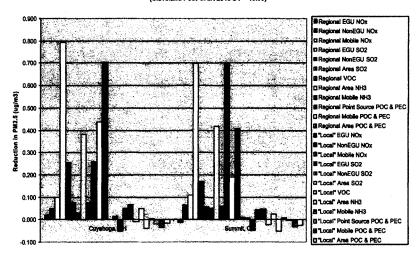
As part of its responsibility to help states identify effective measures for inclusion in their PM_{2.5} SIPs, EPA's Office of Air Quality Planning and Standards (OAQPS) has evaluated the ambient PM_{2.5} improvements of a strategy of reducing each PM_{2.5} source category by 30 percent beyond CAIR in order to determine the relative efficacy of a variety of competing control strategies. Specifically, the analysis allows evaluation of potential emission reductions (i.e., per ton effect) and the magnitude of the projected emissions inventory for that factor (source/pollutant combo). ¹⁵ Of special interest here, EPA staff has analyzed the benefits of this 30 percent policy in the key post-CAIR projected residual nonattainment counties of Ohio (Cuyahoga, Summit, Butler and Hamilton). In each case, EPA found that additional regional power plant sulfur dioxide reductions (denoted in the legend of the bar charts as "Regional EGU SO2") were the most effective strategy, followed by regional reductions in organic and elemental carbon e.g., from diesel vehicles (denoted n the legend of the bar charts as "Regional POC & PEC"). See figures below:

Impact on Cincinnati Nonattainment Area of 30 Percent Reduction in Emissions Across Sectors and Pollutants for "Local (Chicago)" vs "Regional" Sourcea (Cincinnati Post-CAIR 2015 DV = 16.10)



¹⁵ http://www.epa.gov/scram001/reports/pmnaaqs_tsd_rsm_all_021606.pdf





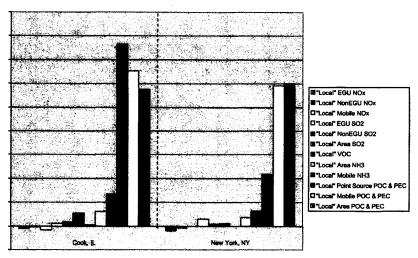
EPA OAQPS staff concluded from this analysis that "local and regional SO2 controls, for both EGU and non EGU point sources remain an effective way to reduce PM_{2.5} concentrations in remaining Eastern post-CAIR nonattainment areas."

3. States and Metropolitan Areas Should Require Retrofit Controls on Local Existing Diesel Fleets

EPA staff's "30 percent" analysis also demonstrates the effectiveness of regional and local controls on sources of organic and elemental carbon. The figures above document the outstanding benefits in Ohio counties of regional reductions in regional organic and elemental carbon (denoted in the legend of the bar graphs as "Local POC & PEC"). In other nonattainment areas, local carbon controls were found to be the most effective local strategies beyond CAIR. For example, in Chicago, New York, and Atlanta the most effective local strategies identified included reductions in point, mobile, and area organic and elemental carbon. However, the policy priority that should be given to diesel emission reduction (i.e., mobile POC and PEC) becomes clear when one recognizes (as EPA now does) that the diesel emissions inventory is likely understated by 2-5 times. Thus, diesel carbon reductions (mobile POC and PEC) in the bar charts should rise to the top of the list of priority local attainment strategies.

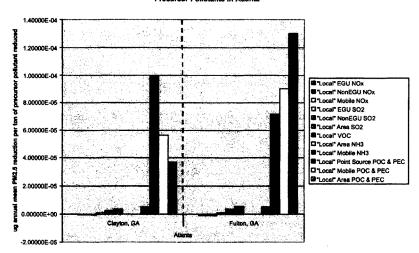
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Relative Effectiveness Per Ton of "Local" Emission Reductions Across Sources and Precursor Pollutants



Relative effectiveness per ton in reducing ambient PM2.5 levels is only one factor in determining the appropriateness of controls. Cost effectiveness per microgram is the more complete measure, and reflects both the atmospheric response and costs of the controls.

Relative Effectiveness Per Ton of "Local" Emission Reductions Across Sources and Precursor Pollutants in Atlanta



From this analysis, EPA OAQPS staff concluded that "[o]n a per ton basis, carbon reductions are the most effective in reducing PM_{2.5} levels in most urban areas."

Diesel particulate matter (e.g., organic and elemental carbon) emissions can be reduced by 90 percent for most existing diesel engines through the combination of a Diesel Particulate Filter and the use of Ultra Low Sulfur Diesel (ULSD) fuel. ULSD will be available throughout the U.S. starting in October of this year due to EPA's new engine rules. Depending on the application, Diesel Particulate Filters (DPFs) typically cost less than \$10K per vehicle. Mandated diesel retrofits of this type on private fleets should be a major feature in the SIPs of the residual post-CAIR nonattainment areas. To help pay for retrofits for public fleets (e.g., transit, waste haulers, and school buses) in cash-strapped states and localities, federal grant and loan programs such as that envisioned by the Diesel Emission Reduction Act of 2005 will be critical. Authorized at \$200 million per year for five years, Congress so far this year is debating funding levels only one-tenth of that amount as part of EPA's FY2007 budget. DERA should be fully-funded.

In sum, based on EPA's most recent analysis of options for addressing nonattainment and what we know about the cost-effectiveness and feasibility of controls, one can conclude that a sound, feasible attainment strategy for remedying these "residual" post-CAIR nonattainment areas would include:

- (A) EPA setting a tighter national or regional cap on sulfur dioxide from power plants;
- (B) States requiring tighter sulfur dioxide controls on power plants that have a significant impact on nearby nonattainment areas:
- (C) EPA completing the process of tightening emission standards for new locomotive and marine diesel engines and issuing regulations that require existing, long-haul trucks meet tighter emission standards when their engines are rebuilt;
- (D) States and local governments requiring additional PM_{2.5} reductions from local diesel fleets.

E. Steep Reductions in PM_{2.5} are Cost-Benefit Justified

Steep reductions in PM_{2.5} from power plants and diesel engines are overwhelmingly costbenefit justified. In the Regulatory Impact Analysis (RIA) to the CAIR rule, EPA found that the benefits of the required reductions exceeded costs by 10:1. ¹⁶ Researchers at Resources for the Future found that power plant SO2 study found cuts down to a national cap of one million tons per year were cost-benefit justified. ¹⁷ EPA's recent analysis of the Clean Air Planning Act (which included a much tighter SO2 cap than in the CAIR rule,

EPA, Regulatory Impact Analysis for the Clean Air Interstate Rule EPA-452/R-05-002 March 2005 available online at: www.epa.gov/cair/pdfs/finaltech08.pdf

¹⁷ Spencer Banzhaf, Dallas Burtraw, and Karen Palmer, Efficient Emission Fees in the U.S. Electricity Sector, Discussion paper 02-45 Resources for the Future (October 2002) available online at: www.rff.org/Documents/RFF-DP-02-45.pdf

but also included steep cuts in nitrogen oxides and mercury) concluded that benefits exceeded costs by a factor of 10:1. ¹⁸ In addition, this same analysis found that the CAPA caps would have virtually no impact on electricity prices and natural gas usage or prices. Similarly, in its RIA for the on- and non-road diesel rules, EPA found a benefit-cost ratio of 10:1. 19 EPA found that the benefits of the DERA \$1B dollar, five-year program to retrofit existing diesel engines with particulate matter controls would yield up to 13 dollars in benefits for every dollar spent and an average benefit-cost ration of 10:1.20

F. Ohio will benefit Most from Additional Reductions in Ohio Power Plant **Emissions**

Perhaps it is stating the obvious that cuts in pollution at Ohio power plants will benefit the health of Ohioans most. But, given the history of argumentation over interstate transport of power plant pollution, it is important not to lose sight of the fact that Ohio's power plant pollution hurts Ohioans most, so cleaning it up will help Ohioans most. Of the over 2500 estimate particulate matter-related premature deaths in Ohio, over 1,700 come from power plant pollution. 21 Indeed, Ohio's PM_{2.5} nonattainment problem is dominated by Ohio power plant pollution. Here, three graphs illustrate that the largest contribution to PM2.5 levels in Cuyahoga, Franklin, and Stark Counties come from Ohio power plants. Thus, reducing these emissions will benefit breathers in Ohio more than it will benefit citizens of any other state:

¹⁸ Multi-Pollutant Legislative Analysis: The Clean Air Planning Act (Carper, 2. 843 in the 108th) October

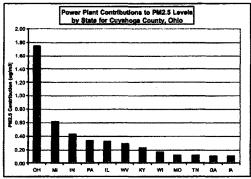
²⁰⁰⁵ available online at: http://www.epa.gov/airmarkets/mp/carper.pdf

19 EPA, Final Regulatory Analysis: Control of Emissions from Nonroad Diesel Engines EPA420-R-04-007

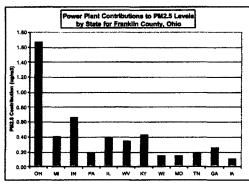
May 2004.

20 U.S. EPA fact sheet on the Diesel Emission Reduction Act September 2005.

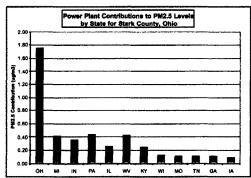
²¹ Clear the Air/Clean Air Task Force, Dirty Air, Dirty Power: Mortality and Health Damage Due to Air Pollution from Power Plants (June 2004) and Air Pollution Locater available at: http://www.cleartheair.org/dirtypower/docs/dirtyAir.pdf, the companion pollution navigator is available at: http://www.cleartheair.org/dirtypower/



Source: EPA



Source: EPA



Source: EPA

G. EPA Must Shoulder its Responsibilities in Helping States Achieve Timely

 It is premature to conclude that implementation of new, tighter particulate standards will be difficult or prohibitively costly until EPA issues its final Regulatory Impact Analysis.

With respect to identifying and assessing the cost of implementation of the proposed new standards, EPA has yet to complete its work. The Regulatory Impact Analysis (RIA) issued with the proposed new particulate matter standards was woefully and woefully inadequate. For example, it failed to identify additional power plant controls as an important strategy for SIPs and failed even to mention mobile source strategies. We understand that EPA is in the process of substantially revising the RIA for the proposed standards. Until EPA has completed this work in an adequate manner, it is premature to conclude that the process of attaining these standards will be prohibitively expensive or difficult.

2. EPA must provide adequate implementation guidance to the states by finalizing its implementation rule.

Much of the angst regarding the proposed particulate matter standard derives from the fact that states have not yet grappled fully with the ramifications of attainment of the current standard. This situation has been exacerbated by EPA's delay in issuing final implementation regulations. In order to give the states adequate guidance as to what is expected, EPA must improve and finalize this guidance. The Clean Air Task Force and several other environmental organizations commented on EPA's proposed PM2.5 implementation rule in January 2006. Our comments are incorporated by reference herein and can be downloaded at http://www.catf.us/advocacy/legal/PM25-NAAQS/. The comments suggest numerous ways in which EPA can improve its implementation rule; I would like to emphasize three of those suggestions:

First, EPA is not free to regulate at it pleases – it must set PM standards according to the process set forth in Section 109 of the Clean Air Act, and then it must implement those standards consistent with the requirements of Sections 188-190, also known as Subpart 4. The Act directs EPA to establish air quality standards that are based on "the latest scientific knowledge useful in indicating the kind and extent of all identifiable effects on public health or welfare which may be expected from the presence of such pollutant in the ambient air." CAA §109(b)(2). An adequate margin of safety must be built into the standard to take account of the "preventative and precautionary" nature of the Act. CAA §109(b)(1); American Lung Ass'n v. EPA, 134 F.3d 388, 389 (D.C. Cir 1998). The NAAQS must be set so as to protect "average healthy individuals" and "sensitive citizens' – children, for example," that are "particularly vulnerable to air pollution." American Lung Ass'n, 134 F.3d at 190.

The resulting standards drive the process by which EPA, States, and local governments cooperatively address conventional air pollution. For nonattainment areas, the path to

compliance is mapped out by Part D of Title I of the Act. Part D contains a set of generic requirements applicable to all criteria pollutants, as well as supplemental measures that were carefully designed by Congress to tackle particular pollutants.

The prescriptive pollutant-specific measures are indicative of a general legislative trend toward increased accountability and specificity. The 1970 and 1977Amendments replaced a decentralized and largely ineffective scheme with compliance deadlines and mandatory control measures. In 1990, Congress added more detail to the NAAQS process by prescribing pollutant-specific strategies, after it recognized that generic controls measures were not bringing polluted areas into attainment fast enough. Subpart 4 of Part D, which prescribes detailed requirements for reducing particulate matter pollution, is among the measures that Congress added in 1990.

In adopting Subpart 4, Congress plainly intended to address the health threats presented by all particles encompassed by the PM₁₀ standard, including fine particles. The House Report on the 1990 Amendments expresses concern specifically about health effects from diesel emissions, smoke, and other combustion-related emissions that are significant sources of PM_{2.5}. Moreover, the control requirements in Subpart 4 are applicable and relevant to the control of PM_{2.5}. Indeed, such control requirements already apply to PM_{2.5} sources in PM₁₀ nonattainment areas.

EPA must therefore require PM_{2.5} nonattainment areas to adhere to the specific compliance schedules and control requirements described in Subpart 4. Those requirements include a mandate for attainment of the NAAQS as expeditiously as practicable, but no later than 6 years from designation for moderate areas, and 10 years for serious areas. CAA §188(c). They also require implementation of "reasonably available control measures" within 4 years, and implementation of "best available control measures" within 4 years of classification (or reclassification) to serious nonattainment. CAA §189. Subpart 4 further mandates control of precursor emissions, and achievement of rate-of-progress milestones. CAA §189(c), (e).

The second major point in our comments is that EPA's proposed approach to regulating the chemical precursors to PM_{2.5} is neither scientifically nor legally supportable. The proposal inexplicably allows States to rebut a presumption that SO₂ and NO_x contribute to the amount of PM_{2.5} in a nonattainment area, and it creates a blanket presumption that ammonia and volatile organic compounds do *not* contribute to PM nonattainment. In fact, recent analysis by EPA's own Office of Air Quality Planning and Standards (OAQPS) suggests that ammonia control is a very effective strategy in many areas.

Each of the Act's nonattainment area requirements apply to $PM_{2.5}$ precursors except where a State or Tribe makes a rigorous technical demonstration that a given precursor does not contribute to $PM_{2.5}$ nonattainment, and that reducing emissions of the precursor would not contribute to reasonable further progress or timely attainment. CAA §189(e). Accordingly, SO_2 and NO_x must be treated as $PM_{2.5}$ precursors at all times, due to the overwhelming scientific evidence that links them to PM formation. Scientific evidence also indicates that ammonia and volatile organic compounds must be treated as

presumptive precursors, to be regulated unless and until EPA determines that they do not contribute to nonattainment in a given area. EPA cannot fulfill its statutory obligation to help States attain the NAAQS "as expeditiously as practicable," see CAA §§172(a), 188(c), if it excludes known PM_{2.5} precursors from regulation.

Finally, EPA cannot use the Clean Air Interstate Rule (CAIR) to categorically displace existing Clean Air Act requirements that apply to power plants. Under EPA's proposal, if a State meets its CAIR obligations entirely through emissions reductions from power plants, EPA would determine that power plants in that State meet the "reasonably available control technology" requirement ("RACT") for SO₂ and NO_x. In effect, power plants — which are responsible for more PM_{2.5} pollution than any other category — would be exempt from the Act's RACT requirement. EPA's exemption for power plants means that communities that are not brought into attainment by CAIR will be forced to consider alternative reduction strategies that are less efficient and less cost-effective than power plant RACT controls.

The residents of nonattainment areas need geographically targeted reductions, which CAIR will not always provide. CAIR, like all regional or national-scale cap-and-trade systems, can be an efficient and effective method of reducing total emissions over large regions, but it does not assure pollution reductions in a specific community by a specific amount according to a specific schedule. EPA's argument against source-specific control requirements – i.e., that they would not affect total emissions – misses the point entirely. The NAAQS attainment process is not, as EPA seems to believe, an exercise in achieving the most cost-effective emissions reductions regardless of where they occur. Rather, it was designed by Congress to reduce the level of pollution in the areas that have unhealthy air.

 EPA can help states achieve attainment by adopting federal control measures and refraining from hampering states' efforts to develop cost-effective regional controls

As discussed above, the first thing EPA can do to aid states in developing adequate SIPs is to recognize that for many areas in the Eastern U.S., the most cost-effective attainment strategy beyond the CAIR rule is additional reductions in power sector sulfur dioxide emissions. EPA should desist in its efforts to dissuade states from pursuing this course of action and remove the current legal and policy roadblocks it has erected.

Secondly, EPA should expeditiously finalize the locomotive and marine portion of the non-road diesel rule. At the time the rest of the non-road diesel rule was finalized, EPA decided delayed finalizing the new engine emission standards for locomotives and certain marine vessels. These engines are the source of avoidable particulate matter emissions and EPA should move quickly to finalize stringent new standards.

Lastly, while the new emissions standards for on-road engines eventually will lead to significant reductions in particulate matter emissions from trucks and other vehicles, due to the durability of the diesel fleet and slow turnover of these vehicles, the full benefits of

this program will not be realized for decades, too late to provide states meaningful help in meeting near-term attainment deadlines. EPA has the opportunity and the legal authority under the Clean Air Act to require that on-road engines meet more stringent emission standards when these engines are rebuilt. Many truck engines are driven over one million miles during their useful lives. Typically, these engines are rebuilt at least once during that period. Requiring these engines to meet stricter emission standards when they are rebuilt would mean deeper reductions sooner. Federal action on interstate trucks is particularly appropriate given that these trucks constitute a large percentage of the on-road diesel particulate matter inventory but are generally beyond the reach of state regulation in SIPs.

H. EPA Should Engage States and Regional Air Agencies in SIP Planning Processes

From the experience of the Clean Air Task Force and our affiliated state and local allied organizations, we are aware that many states are just beginning to focus on the issue of PM_{2.5} nonattainment. Many of these states have been in nonattainment of the ozone standards for some time, are more accustomed to working on ozone issues, and thus have devoted the lion's share of their attention to their ozone SIPs. Ozone SIPs are also due first. For other states, PM_{2.5} nonattainment is their first real experience with nonattainment and they need guidance and assistance in developing adequate SIP measures.

One of the first areas to grapple with PM_{2.5} SIP-planning has been the Mid-Ohio Regional Planning Commission (MORPC) which sponsored a diesel stakeholder's process to develop the diesel component of its PM_{2.5} SIP. The process included participants such as private and public diesel fleet managers, diesel engine manufacturers, state and local government officials, and environmental organizations. The process was professionally facilitated with financial support from U.S. EPA. The MORPC process resulted in a consensus set of recommendations that MORPC has forwarded to Ohio EPA for consideration in developing the SIP. However, this process was one of the first of its kind around the U.S. New Jersey last year recognized the seriousness of its PM_{2.5} attainment challenge and moved to pass legislation setting emission standards for certain diesel fleets and funded the public fleet component of this clean up requirement by tapping an underutilized hazardous waste fund.

Regional air planning agencies such as the Lake Michigan Air Directors Consortium (LADCO), the Northeast States for Coordinate Air Use Management (NESCAUM), Mid-Atlantic Regional Air Management Association (MARAMA), Southeastern States Air Resource Managers (SESARM), and the Ozone Transport Commission have begun to examine basic strategies and evaluate control measures, but with SIP submission deadlines looming in the next 12-24 months, EPA and the states should view today's hearing as a "wake-up" call to quicken the pace of PM_{2.5} SIP development.

I. NAAQS-Setting Process Issues

The Utility Air Regulatory Group (UARG), a trade group representing coal generators, at a recent EPA NAAQS workshop sponsored by the Office of Air Quality Planning and Standards (OAQPS) in North Carolina called for lengthening the current statutory timetable for revising the national ambient air quality standards (NAAQS) from 5 years 8-10 years. Furthermore, UARG argued that if EPA fails to revise the standard during that prescribed time period, EPA should forego the authority to revise it until another 8-10 year period has passed. Legislation amending the Clean Air Act in this fashion would strike a devastating blow against air policy based on sound science. One need only bok at the significant number of new articles linking particulate matter to lower ambient concentrations that have been published since the last revision to see that five years is not too short a time for the scientific underpinning of the standard to become outdated. A regularly-evaluated NAAQS allows EPA and the states to ensure that the policy target for their controls measures is based on best available science. Science-driven policy targets should be a consensus goal for environmental policy regardless of political party affiliation or philosophy. Indeed, a well-founded health-based target is important to add legitimacy for implementation efforts. For example, the management of industries, such as the power industry, should be able to clearly articulate to their boards of directors and shareholders exactly why the corporation is being asked to spend money on compliance. A policy target based on sound, up-to-date science allows this.

EPA does have a poor track record of meeting the 5-year revision requirement. The chart below documents EPA's record in revising the NAAQS for the variety of criteria pollutants since passage of the Clean Air Act in 1970.

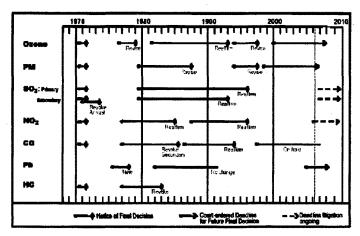


Figure 1. History of NAAQS Reviews: 1970 - Present

But the answer to this problem is not to extend the period of the review. Nor is it to eliminate the EPA Staff Paper from the NAAQS-setting process.

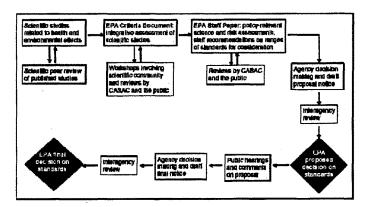


Figure 2. Current NAAQS Review Process

The flow chart above sets out the steps in the process by which EPA sets the NAAQS. Although not directly relevant to the current round of particulate matter standard revision, the recent proposal by the Assistant Administrator for Air and Radiation to drop the Staff Paper (and EPA staff's interaction with the Clean Air Science Advisory Committee or CASAC) from this process in the future and replace it with agency position set by political appointees threatens to "politicize" what to date has been an excellent example of science-based policy. EPA should reject, and Congress should not support, this shift. Indeed, Congress should insist that EPA return to its previous practice. The Staff Paper is part of a proper and time-tested deliberative process of making recommendations about NAAQS revisions to the EPA Administrator. While the Criteria Document serves as the repository of all the scientific studies published since the previous revision, the Staff Paper provides the best policy recommendations by career EPA staff. First, it is important to keep science and policy separate and the bifurcation between the Criteria Document and the Staff Paper achieves this goal. Secondly, it is important not to politicize the consideration of a standard revision early in the process. The flow chart above recognizes that a NAAQS proposal ultimately will go through public hearings and interagency review (including by the White House), but the Staff Paper offers the opportunity for EPA staff to express recommendations for the Administrator unconstrained by political concerns and should be preserved.

In practice, it is doubtful that revisions that strengthen the ambient standards will occur without clear institutional responsibility for driving the process. The Staff Paper process in conjunction with CASAC review has worked well in the past to advance sound science-based policy. EPA has not made the case that there is sufficient reason to scrap this key piece of good deliberative process.

Conclusion

In conclusion, particulate matter is the most important pollutant that EPA regulates. Setting protective air quality standards for particulate and implementing them should be EPA's top environmental health priority. As EPA acknowledges by proposing to revise the particulate matter standards, the current PM2.5 standard is not adequately protective of public health. However, given numerous health studies that peg serious adverse health effects to much lower ambient levels, EPA's proposed revision to the standard too is be insufficient and must be strengthened.

Although the Supreme Court has made it clear that EPA may not take into account issues of cost and implementation in the NAAQS-setting process, this Subcommittee has solicited testimony from elected officials and, industry representatives whose only interest is in these matters is cost and implementation concerns. As a result, the Clean Air Task Force has provided evidence that complying with stricter particulate matter standards is achievable, cost-benefit justified, and can be met with affordable, available technologies that will not damage America's economy. We urge the members of this Subcommittee to support the requisite tightening of the standards to adequately protect public health and to support the efforts of EPA and the states in achieving them in a timely fashion.

Thank you for your kind attention. I would be happy to answer any questions the Subcommittee members may have.



MEMORANDUM

TO: FROM:

Conrad Schneider David Schoengold

SUBJECT:

The Health Benefits of Meeting Alternative PM2.5 Attainment

Thresholds

DATE:

March 23, 2006

Introduction

This paper analyzes the health benefits (in terms of reduced mortality) which can be achieved by meeting attainment thresholds for PM2.5. It looks at meeting the current standard of 15.05 ug per m³ as well as standards better than that. This work is based on previous work done by Abt Associates which was reported in their paper, "Power Plant Emissions: Particulate Matter-Related Health Damages and the Benefit of Alternative Emission Reduction Scenarios," June 2004.

Method

The Abt Associates paper presents a set of equations relating changes in PM2.5 concentrations at the county level to changes in the mortality rate for an area. The equation is an exponential with the following format:

Delta Mortality Rate = $-(Y_0 * (EXP(-BETA * dPM2.5) - 1))$

where

Y₀ = the county level death rate

dPM2.5 = the change in the PM2.5 concentration

Beta = 0.0046257.

County level populations and average death rates were obtained from the U.S. Census Bureau. A separate equation was set up for each county in the U.S.

In order to determine the health benefit of achieving attainment, it was necessary to determine the starting point which is the current PM2.5 concentration level by county. For these values the EPA's reported PM2.5 design values were used. Each year the EPA reports PM2.5 values for the previous three years. In this analysis we used design values for 1999-2001, 2000-2002, and 2001-2003. The design value levels have, in general,

¹ The specific equations used are from Appendix A, page A-1.

been decreasing. Design values are not reported for all counties, but only for those with monitors. In 1999-2001, there are 307 counties with reported design values. For 2000-2002 there are 516, and for 2001-2003 there are 533. No estimates were prepared for the other counties.

The numbers reported in this paper are based on the 2001-2003 design values.

Results

There are 82 counties with reported 2001-2003 design values greater than or equal to 15.05 ug per m³. This analysis reports the benefit of each of these counties reducing the current PM2.5 level to 15.05. It does not include any benefit which is likely to occur in other counties when the actions taken to lower the PM2.5 concentrations in nonattainment counties also reduces the PM2.5 concentrations in counties which are currently in attainment.

We also analyzed the benefits in terms of additional mortality reductions from using a lower attainment threshold than 15.05. Specifically, we looked at 14.0 and 12.0. The benefits in reduced mortality are shown in the table below.

Table 1. Reduced Mortality Benefits of PM2.5 Attainment (annual deaths)

Attainment	Reduction in
Level	Mortality
15.05 ug/m ³ 14.00 ug/m ³ 12.00 ug/m ³	7,420
14.00 ug/m ³	10,090
12.00 ug/m ³	17,860

Table 2. Benefit of a Lower Attainment Threshold

Reduction	Additional
In Threshold	Lives Saved
From 15.05 to	2.670

MSB Energy Associates

14.00

Page 2

From 15.05 to 12.00

10,440

From 14.00 to 12.00

7,770

Conclusion

Meeting a lower threshold for PM2.5 attainment will save many thousands of additional lives compared to meeting an attainment level of 15.05 ug per ${\rm m}^3$.

MSB Energy Associates

Page 3

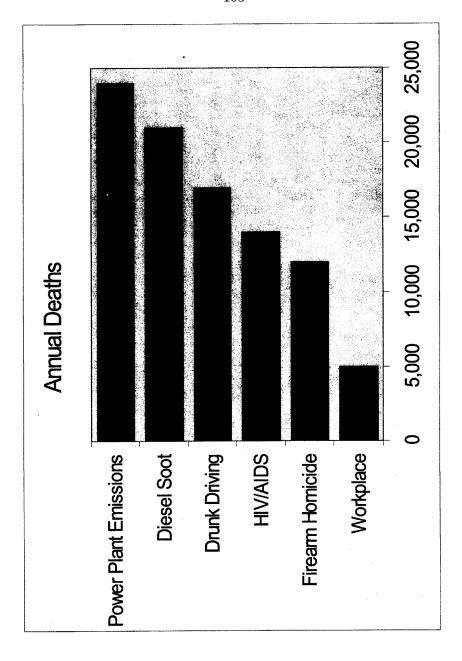
Before the Subcommittee on Clean Air, Climate Change and Nuclear Safety

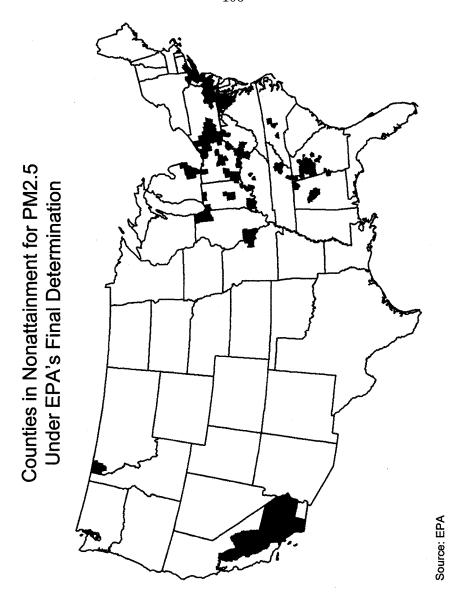
Environment and Public Works Committee of the United States Senate

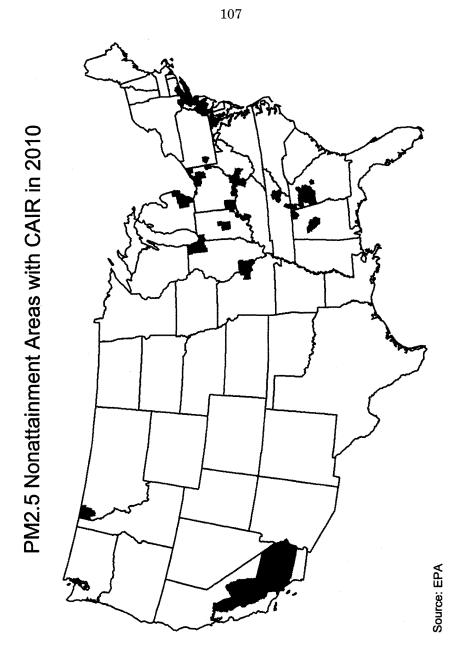
Hearing on EPA's Proposed Particulate Matter Standard

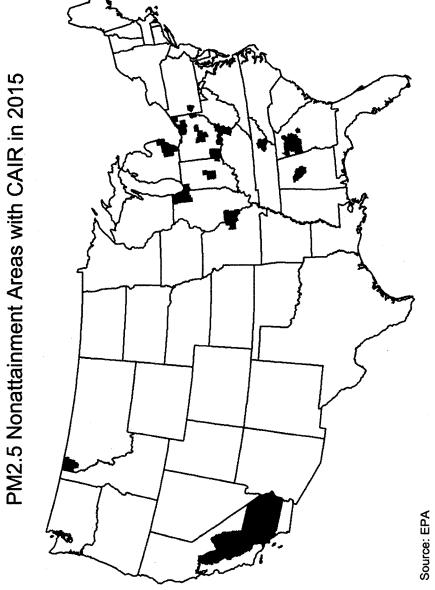
CLEAN AIR TASK FORCE

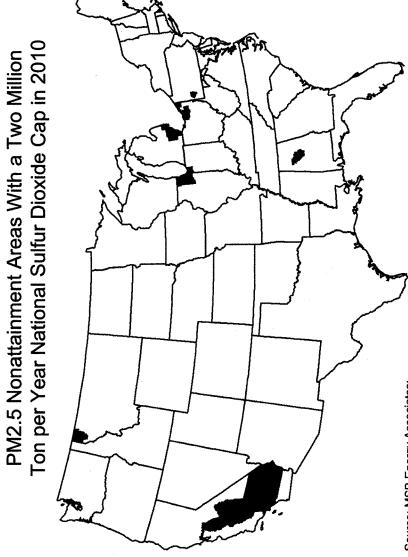
June 13, 2006 Conrad G. Schneider Advocacy Director



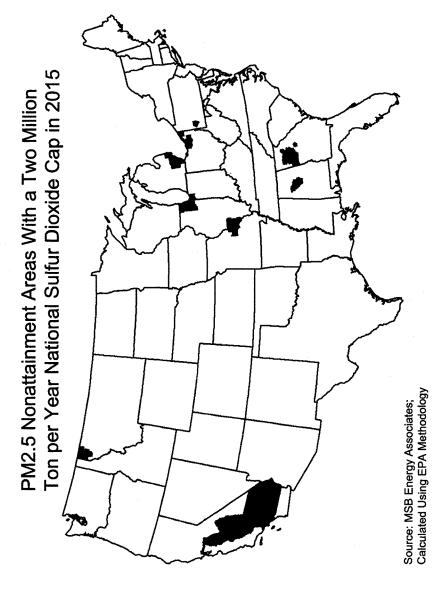


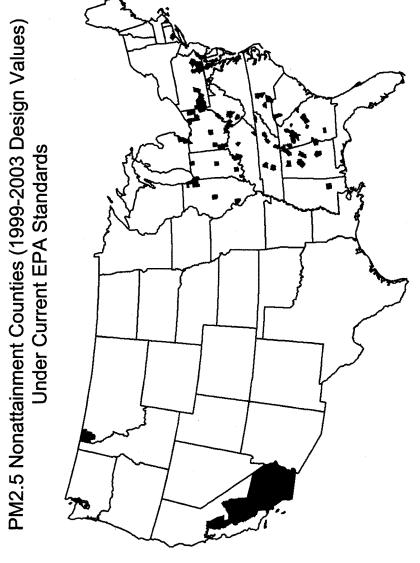




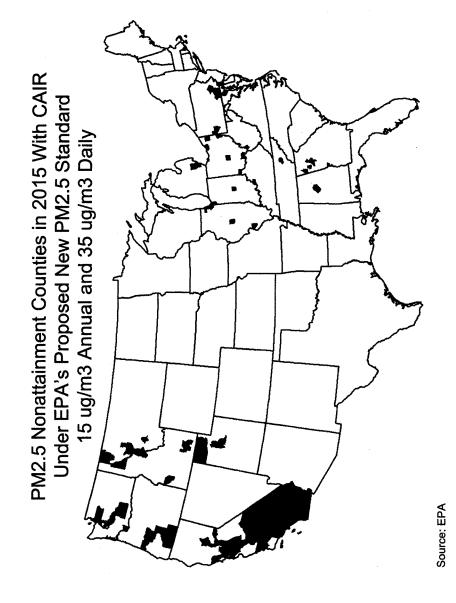


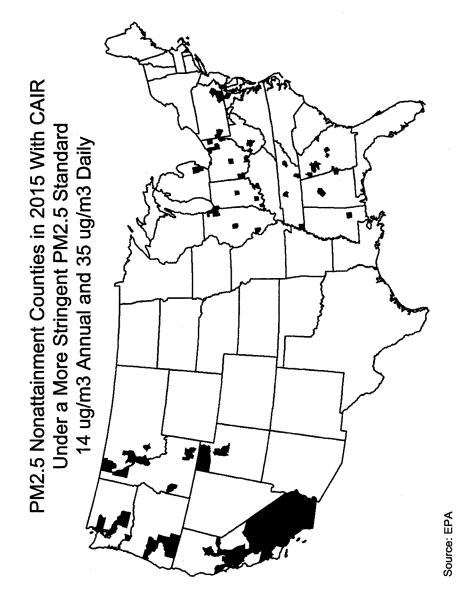
Source: MSB Energy Associates; Calculated Using EPA Methodology



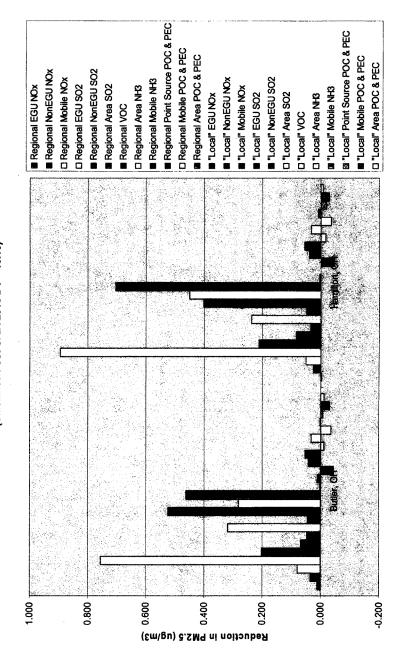


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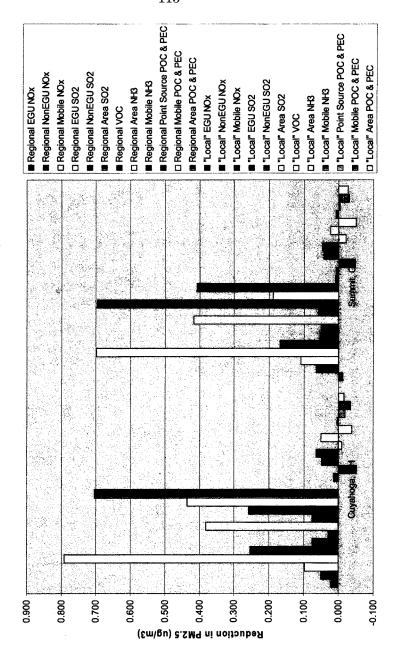




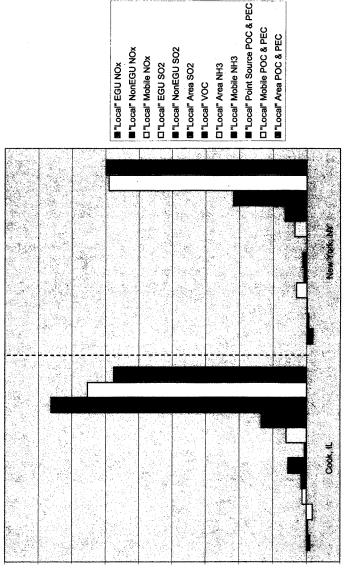
Impact on Cincinnati Nonattainment Area of 30 Percent Reduction in Emissions Across Sectors and Pollutants for "Local (Chicago)" vs "Regional" Sources (Cincinnati Post-CAIR 2015 DV = 16.10)



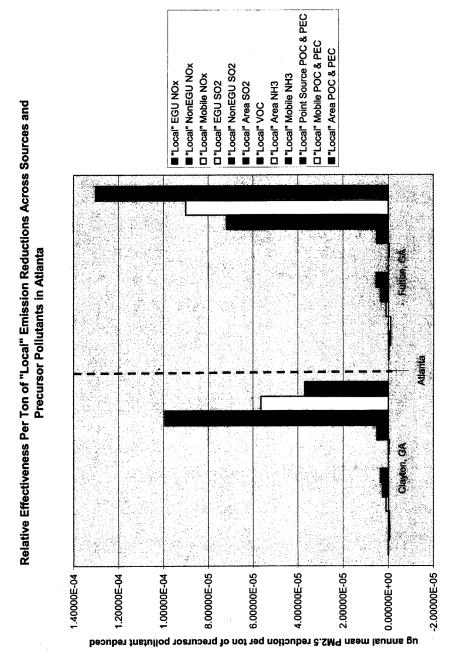
Impact on Cleveland Nonattainment Area of 30 Percent Reduction in Emissions Across Sectors and Pollutants for "Local (Chicago)" vs "Regional" Sources (Cleveland Post-CAIR 2015 DV = 16.68)

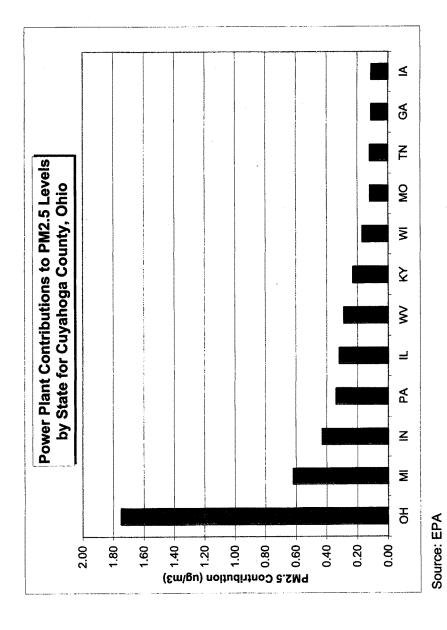


Relative Effectiveness Per Ton of "Local" Emission Reductions Across Sources and Precursor Pollutants



Relative effectiveness per ton in reducing ambient PM2.5 levels is only one factor in determining the appropriateness of controls. Cost effectiveness per microgram is the more complete measure, and reflects both the atmospheric response and costs of the controls.





RESPONSES BY CONRAD SCHNEIDER TO ADDITIONAL QUESTIONS FROM Senator Inhofe

Question 1. You testified that at our February (sic) 9, 2006 hearing, there was agreement that there was no relationship between natural gas prices and clean air regulations. Are you aware that when asked that specific question, Mr. Jack Gerard, President of the American Chemical Association testified, "Well, like you, Mr. Chairman, having lost 100,000 jobs in our industry directly related to that increased natural gas price, we believe there is a direct correlation. Like you, we think that is a no-brainer. It is clearly happening." Would you like to modify your testimony on this matter?

Response. No. A review of the unofficial transcript from that hearing reveals that in the course of over two hours of testimony in a hearing solely devoted to the hypothesis that clean air regulations have been largely responsible for driving up naturally responsible fo ural gas prices, not one witness agreed with that proposition. In fact, Messrs. Wehrum of EPA and Gruenspecht of EIA explicitly declined several invitations by interrogating senators to lead them to that conclusion. Mr. Bluestein directly contradicted the proposition. Mr. Gerard, while undoubtedly an expert on the topic of the economics of the chemical industry, would seem unlikely to possess the particular analytic expertise regarding the relationship between specific clean air regulations not pertaining to his industry and natural gas prices. In any event, Mr. Gerard's statement is actually ambiguous on the point of whether increased natural gas prices have been due to clean air regulations. Indeed, Mr. Gerard's statement could fairly be read mean that he finds a relationship between increased natural gas prices and lost jobs—a proposition not under dispute. The question at issue is whether regulations promulgated under the Clean Air Act have had a significant impact on natural gas prices. The record will clearly show that none of the witnesses at the hearing testified that Clean Air Act regulations were a significant cause of recent high natural gas prices. I would be glad to amend my answer to include specific quotations demonstrating this fact at such time as the official transcript becomes available.

Question 2a. Mr. Schneider, in your testimony you stated regarding Butler County, Ohio that in order to achieve the standards "powerplant sulfur dioxide is the next lowest hanging fruit. We need to take the second bite at that apple to make achieving the standards a reality" Mr. Schneider, historically Butler County has been a manufacturing based county relying on steel and paper manufacturing as well as the automotive industry. They have been particularly hard hit over the last few decades with the loss of thousands of manufacturing jobs and manufacturing few decades with the loss of thousands of manufacturing jobs and manufacturing employers. At present, of the top 10 employers in the county, 4 are governmental units, 3 are hospitals, and only 1 is a manufacturing facility AK Steel in Middletown. AK Steel operates at the former Armoo facility and employs thousands fewer workers today then during their heyday. Facilities such as the International Paper Plant (former Champion Paper) in Hamilton employs (sic) far fewer people than before and other facilities such as the GM Fisher Body plant in Fairfield have completely closed. At this point, the county is starting to recapture some of their (sic) lost manufacturing jobs. What has been a benefit to Butler County has been somewhat stable utility prices since 1994, until January 2006, when the county saw an increase of 30 percent in their (sic) utility rates.

Please provide the Committee a detailed analysis to substantiate your claim that

utility emissions in Butler County are the next lowest hanging fruit.

Response. The issue of identifying the most cost-effective emission control measures to bring the county into attainment with the National Ambient Air Quality Standard (NAAQS) for fine particulate matter (PM_{2.5}) should be of great interest to the industries in Butler County that you identify. In writing a State Implementation Plan, a State or metropolitan area must reduce emissions sufficiently to achieve attainment of the National Ambient Air Quality Standards (NAAQS). If those reductions do not come from one sector or group of pollution sources, they must come from another. If they do not come from the most cost-effective source, they will come from other less cost-effective sources. First, I will discuss the general cost-effectiveness of powerplant sulfur dioxide controls for particulate matter reduction. Second, I will address the specific cost-effectiveness for Butler County, Ohio of incremental additional sulfur dioxide controls on powerplants beyond those required by the Clean Air Interstate Rule (CAIR).

It is well-established that for fine particulate reduction, there is no more cost-effective source than cuts in powerplant sulfur dioxide. In fact, this is a large part of the policy justification for the Administration's "Clear Skies" proposal—i.e., that controls on powerplant sulfur dioxide could obviate the need for States to adopt additional local emission control measures. See e.g., Testimony of Jeffrey Holmstead,

Assistant Administrator, U.S. Environmental Protection Agency, Before the Energy and Air Quality Subcommittee Energy and Commerce Committee United States House of Representatives May 26, 2005 at p. 8. This is true simply because on a dollars-per-ton basis, nothing rivals powerplant sulfur dioxide reductions for PM2.5 reduction. The reason is simple: sulfur dioxide can be reduced through a combination of using coals with lower fuel-bound sulfur content, coal washing, and installing post-combustion sulfur removal devices such as flue gas desulfurization. In addition, under the Acid Rain program and the CAIR rule, these emission control strategies are combined with broad regional emission credit trading programs that can lower overall and firm-specific costs relative to plant-by-plant controls. Significant sulfur dioxide reductions can be achieved for less than \$2000 per ton removed. Compared to powerplant controls, fine particulate precursor emission control measures on industrial and other sources are relatively less cost-effective i.e., have higher dollars per ton of removal costs.

Specifically, U.S. EPA in its Clean Air Interstate Rule (CAIR) has analyzed the relative cost-effectiveness of various control measures on a variety of pollution source categories. See the CAIR Preamble 70 Fed. Reg. 25162 (May 12, 2004) and the original Interstate Air Quality Rule (IAQR) proposal 69 Fed. Reg. 4566 (January 30, 2004). For the final CAIR rule (see 70 Fed. Reg. at 25201-05), EPA's comparisons (and their SO₂ removal average costs in \$/ton) were: (1) for Best Available Control Technology (BACT) determinations for coal-fired electric utility boilers (\$400-2100/ton); (2) Best Available Retrofit Technology (BART) for electric utility boilers as proposed in 2005 (\$2600/ton in 2015, \$3400/ton in 2020); (3) Non-road diesel engines and fuel (2004 Nonroad Diesel Heavy Engine Rule (\$800/ton). By way of comparison, recent SO₂ allowance price as reported by the trade publication Air Daily on August 28, 2006 was less than \$700/ton. The marginal costs of several State sulfur dioxide programs (and the Western Regional Air Partnership or WRAP) were reported by EPA (Wisconsin \$1400/ton; North Carolina \$800/ton; WRAP \$1100-2200/ ton) and New Hampshire at \$600/ton. See 70 Fed Reg. at 25202 and 69 Fed. Reg. at 4613. EPA also estimated that the average costs of sulfur dioxide controls for CAIR was between \$500-700/ton, with marginal costs between \$700-1000/ton. See 70 Fed. Reg. at 25602–03). EPA dubbed CAIR's approach to sulfur dioxide reduction to be "highly cost-effective" since it "has a cost-effectiveness that is at the lower end

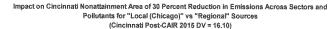
of the updated reference tables i.e., the SO₂ cost comparisons set forth above." Id. The Ozone Transport Commission (OTC) has also analyzed the relative cost-effectiveness of competing control strategies for sulfur dioxide (as a particulate matter precursor) relative to other strategies to reduce directly-emitted and secondarily-formed particulate matter. The table below illustrates that there are no control strategies that are consistently more cost-effective than the \$700-1000/ton range of

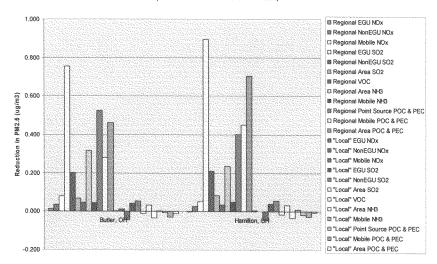
incremental sulfur dioxide controls achievable on powerplants.

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In addition, the California Air Resources Board (CARB) has analyzed the relative cost-effectiveness of sulfur dioxide controls in the context of promulgating a rule governing emissions from marine harbor craft. CARB estimated the cost-effectiveness of the sulfur dioxide reductions of this rule at between \$5800–6600/ton. The particulate matter cost-effectiveness figure is about \$53,000/ton. See "Initial Statement of Reasons, Proposed Regulation for Auxiliary Diesel Engines and Diesel-Electric Engines Operated on Ocean-going Vessels within California Waters and 24 Nautical Miles of the California Coastline," California Air Resources Board (October 2005) at p. 159. Clearly, the sulfur dioxide number for harbor craft emission reductions (a measure California is in the midst of finalizing) is far higher than current powerplant sulfur dioxide reduction costs as reflected by the sulfur dioxide allowance price, and by the CAIR "highly cost-effective" cost metric.

For States projected to remain in nonattainment notwithstanding the CAIR rule reductions, EPA is in the process of analyzing the most effective additional measures (beyond CAIR) that States can employ. EPA is also undertaking this analysis as part of finalizing its Regulatory Impact Analysis (RIA) of the proposed tighter particulate matter standards. The following bar chart, which I submitted as part of my written hearing testimony, is EPA's best current analysis of the relative effectiveness of various attainment strategies for Butler County, Ohio. EPA in this analysis conducted a "thought experiment" assuming an across-the-board 30 percent cut over and above the requirements of the CAIR rule by each economic sector (e.g., powerplants, mobile sources, industrial sources, area sources, etc.), by geographic region (e.g., regional vs. local controls), and by pollutant (e.g., sulfur dioxide, nitrogen oxides, volatile organic compounds, and ammonia). The bars show the potential reduction in µg/m³. The taller the bar on the chart, the more effective the strategy. The results of EPA's analysis as displayed on the bar chart reveal that the most effective strategy is further control of "Regional EGU SO₂" which translates as regional sulfur dioxide control on powerplants.





I would note that the second most effective strategy—"Regional Mobile POC and PEC" (which translates as regional diesel organic carbon and elemental carbon)—is actually not the next highest bar on the chart. That is because EPA now recognizes that its emissions inventory for mobile diesel sources is understated by a factor of at least two but did not take that into account in creating this chart. So, that bar (in bright yellow) should be at least twice as high as it appears on the chart. Together these strategies (a 30 percent additional cut in powerplant sulfur dioxide beyond CAIR and a 30 percent cut in diesel organic and elemental carbon) would produce approximately 1.4 $\mu g/m^3$ in PM2.5 reduction for Butler County. The PM2.5 design value for Butler County is 16.10 $\mu g/m^3$. The PM2.5 NAAQS is 15.0. So, a 1.4 $\mu g/m^3$ reduction would bring Butler County's design value down to 14.7 $\mu g/m^3$ and into attainment with the standard.

Note that following these two strategies, the next most effective strategies EPA identified are "Regional Point Source POC and PEC" and "Regional Area Source POC and PEC". These translate into carbon reductions from regional industrial and area (i.e., small business) sources, some of which may be located in Ohio and some in upwind States. By contrast, "local" sources of all kinds i.e., sources located in Butler County (see the right-hand set of bars on the chart) were not found to be effective in reducing Butler County's PM_{2.5} design value. Thus, if regional powerplant emissions are not reduced beyond CAIR and diesel emissions reduction measures are not also part of the strategy, Butler County will be forced to adopt relatively less-effective measures for example on pollution sources such as AK Steel or International Paper's Hamilton plant. While a possible increase in utility electric rates could impact these firms, they would feel the cost of emission controls on their own facilities directly and probably more significantly. Each of the industries mentioned in the question emit fine particulate matter and each could be subject to emissions controls if limits on powerplant emissions beyond those required by the CAIR rule are not adopted.

Question 2b. Please explain whether further utility reductions in Butler County would cause any further increases in utility rates and what that impact would be on jobs in the County, particularly manufacturing jobs.

Response. EPA uses the Integrated Planning Model (IPM), an economic and electricity power dispatch computer model, to predict the electric price impacts of its air regulatory policies. EPA employed ICF Consulting to run the IPM model to evaluate the electricity price impacts of its CAIR rule. CATF also retained ICF to run the IPM model to evaluate a suite of tighter-than-CAIR powerplant sulfur dioxide caps to evaluate their environmental and economic performance. We filed the results of those runs in the CAIR rulemaking docket. The results as presented to then-EPA Administrator Leavitt in a December 2004 meeting are attached to this

document. In short, CATF found that a significantly tighter interstate sulfur cap (a CAIR region cap of 1.84 million tons in 2015 vs. the CAIR cap of 2.7 million tons in 2015) would add less than a nickel per million British Thermal Units to the price of natural gas in 2020 and less than 50 cents per month to the average residential electric bill

In addition, EPA has analyzed other proposals that include tighter sulfur dioxide emission limits than the CAIR rule. For example, in October 2005, EPA released full cost-benefit analyses of the CAIR rule and the Clean Air Planning Act (S.843). See: http://www.epa.gov/airmarkets/mp/cair—camr—cavr.pdf and http://www.epa.gov/airmarkets/mp/carper.pdf. The Clean Air Planning Act contains not only a sulfur dioxide cap that is much tighter and which must be achieved much more quickly than that in CAIR. EPA also modeled the cost of CAPA's aggressive mercury provision as part of this analysis as well. For CAIR, EPA found that the provision as part of this analysis as well. For CAIR, EPA found that the projected retail electric price would be 6.1 cents per kilowatt hour in 2010, 6.5 in 2015 and 2020. Notwithstanding the additional mercury requirement, EPA's analysis of the Clean Air Planning Act estimated that the projected retail electric price under CAPA would be 6.5 cents per kilowatt hour in 2010, 2015, and 2020—virtually identical to that projected for CAIR tually identical to that projected for CAIR.

Therefore, economic analysis demonstrates that further utility sulfur dioxide re-

ductions should cause no further increase in electric or natural gas utility rates in

Butler County and no related impact on jobs.

Question 2c. In your testimony you stated "the current proposed standards are achievable, cost benefit justified and can be met with affordable, available technology that will not damage America's economic vitality or the economic health of the sectors that will be called upon to shoulder the load." What exactly can Butler County do to obtain the proposed standards without affecting their economic vitality

or economic health?

Response. Please refer to my answer to question 2(a) above. In short, based on U.S. EPA's latest analysis, the combination of a regional 30 percent additional reduction in powerplant sulfur dioxide and a 30 percent reduction in diesel organic and elemental carbon is projected to bring Butler County in to attainment. My answer immediately above (for question 2(b)) demonstrates that the powerplant portion of the equation can be achieved economically. If the diesel portion of the strategy can be achieved through funding and strategic deployment of money for retrofitting existing diesel engines e.g., under the Diesel Emission Reduction Act of 2005, then proported the proportion of the strategic deployment of money for retro-fitting existing diesel engines e.g., under the Diesel Emission Reduction Act of 2005, then impacts on Butler County's economy can be further minimized.

Question 2d. Before making your claims about Butler County in your testimony, did you examine the impacts on the January 2006 utility rate increases on jobs in the County, economic outlook, or the impact on proposed new facilities or expansions? Did you look at these factors in relation to your claims regarding the next wave of reductions?

Response. Not specifically. I accept notion that a substantial increase in electric rates could cause these economic impacts. The assertion in my testimony rests on the premise that additional powerplant sulfur dioxide controls will not in fact lead to an increase in utility natural gas or electric rates. This premise is supported by the EPA IPM modeling cited in my previous answers.

Question 2e. At an environmental conference in Columbus, Ohio on July 27, 2006, Ohio EPA Director and Air Chief both reported that they don't know how they will get the current PM_{2.5} nonattainment areas into compliance. Given their expertise and understanding of Ohio, how do you respond to their statements?

Response. I would not interpret these statements as claiming that achieving attainment is physically impossible. If emissions upwind and in the Ohio PM_{2.5} nonattainment areas are reduced sufficiently, then these areas will attain. These statements seem to reflect instead the political challenge of obtaining the needed reductions—how to mandate reductions on upwind and in-state sources in a way that will be effective but also politically acceptable in Ohio and the Midwest? These statements also likely betray a certain amount of frustration with U.S. EPA. Indeed, EPA has failed to formulate sufficient national control programs to help States achieve timely attainment. Only when this Committee focused attention on the seriousness of the challenge, for example in Cleveland, Ohio, did EPA respond with a deliberative process to evaluate the available options. In this way, the Committee's process served to spur the needed attention. Frankly, this level of effort (i.e., a partnership between Federal, regional, State, and local air officials, as well as a host of private sector firms and nongovernmental organizations to identify, evaluate, propose, and win support for emission reductions) must be replicated in each of the post-CAIR residual nonattainment areas if they are to attain in a timely fashion. Each area poses its own unique set of challenges. Nonattainment with the PM_{2.5} standard presents a serious problem that deserves concerted attention of these authorities. $PM_{2.5}$ nonattainment implicates public health—by shortening the lives and hurting the health of area residents—and stresses local economies. Given the stakes, EPA, the regional, State and local air agencies must redouble their efforts and focus on the necessary measures to achieve timely attainment. The Clean Air Task Force and our State environmental group partners are ready to assist in any way that we can.



Comparison of Various Potential CAIR SO2 Caps

December 13, 2004

The following tables summarize IPM runs of progressively tighter power plant NOx and SO2 caps in the CAIR region using EPA's set-up and assumptions.

This analysis demonstrates that a CAIR cap consistent with EPA's 2001 "Straw" proposal and faithful implementation of the CAA could provide the following benefits:

- 39 fewer counties in PM2.5 nonattainment in 2010;
- Over 4,000 additional lives saved per year.

With only the following costs:

- Increased total electricity production cost of less than 3%;
- \$0.50 increase on the average monthly residential electric bill
- No reduction in coal production; and
- · No increase in natural gas prices.

Less stringent caps would have correspondingly smaller benefits and costs.

CAIR/SNPR, CATF-1, CATF-2, CATF-3, CATF-4

SO2 caps

CAIR/SNPR -IAQR region caps of 3.9 million tons in 2010 and 2.7 million tons in 2015.

CATF-1 IAQR region cap of 1.84 million tons in 2009

CATF-2 IAQR region caps of 3.9 million tons in 2010 and 1.84 million tons in

CATF-3 IAQR region caps of 3.9 million tons in 2010 and 2.0 million tons in 2015.

CATF-4 IAQR region caps of 3.9 million tons in 2010 and 2.25 million tons in

2015.

Benefits

SO2 emissions (million tons)

Option	2005	2010	2015	2020
Base Case		9.9	9.2	9.0
CAIR/SNPR		5.9	5.4	4.2
CATF-1		2.8	2.8	2.8
CATF-2		4.7	3.6	3.0
CATF-3		4.8	3.7	3.0
CATF-4		4.9	3.9	3.2

Counties in Nonattainment for PM2.5 (East)

Option	2005	2010	2015	2020
Base Case		61	41	
CAIR/SNPR		22	12	
CATF-1		7	5	
CATF-2		16	6	
CATF-3		16	6	
CATF-4		17	6	

Reductions in PM2.5 Related Mortality (compared to the base/reference case)

Option	2005	2010	2015	2020
CAIR/SNPR		8,300	11,700	14,600
CATF-1		14,800	19,600	18,800
CATF-2		10,800	17,100	18,300
CATF-3		10,600	16,800	18,100
CATF-4		10,500	16,400	17,500

Costs

Production Costs (Billions)

Option	2005	2010	2015	2020
Base Case	77.20	85.71	95.57	108.88
CAIR/SNPR		89.43	99.99	113.77
CATF-1	76.98	94.83	104.53	117.04
CATF-2	76.91	91.16	102.41	116.32
CATF-3	76.91	90.88	102.10	116.19
CATF-4	76.91	90.68	101.65	115.89

10

Retail Prices (\$/MWh)

Option	2005	2010	2015	2020
Base Case	58.5	59.5	62.2	63.9
CAIR/SNPR		60.8	63.9	65.1
CATF-1	58.2	62.6	65.1	65.7
CATF-2	58.2	61.5	64.6	65.6
CATF-3	58.2	61.4	64.5	65.6
CATF-4	58.2	61.3	64.3	65.5

Bill Impacts (\$/Month) based on average residential usage of 907 kWh per month (2002)

Option	2005	2010	2015	2020
Base Case		\$53.97	\$56.42	\$57.96
CAIR/SNPR		\$55.15	\$57.96	\$59.05
CATF-1		\$56.78	\$59.05	\$59.59
CATF-2		\$55.78	\$58.59	\$59.50
CATF-3		\$55.69	\$58.50	\$59.50
CATF-4		\$55.60	\$58.32	\$59.41

Bill Differential Compared to Base Case (\$/Month)

Option	2005	2010	2015	2020
Base Case				
CAIR/SNPR		\$1.18	\$1.54	\$1.09
CATF-1		\$2.81	\$2.63	\$1.63
CATF-2		\$1.81	\$2.18	\$1.54
CATF-3		\$1.72	\$2.09	\$1.54
CATF-4		\$1.63	\$1.90	\$1.45

Coal Prices (Minemouth \$/MMbtu)

Option	2005	2010	2015	2020
Base Case		0.60	0.57	0.55
CAIR/SNPR		0.62	0.59	0.57
CATF-1	0.66	0.65	0.62	0.58
CATF-2	0.66	0.62	0.60	0.58
CATF-3	0.66	0.62	0.60	0.58
CATF-4	0.66	0.62	0.60	0.58

11

128

Gas Prices (Henry Hub \$/Mmbtu)

Option	2005	2010	2015	2020
Base Case		2.97	2.96	2.87
CAIR/SNPR		3.06	3.01	2.92
CATF-1	2.89	3.25	3.06	2.97
CATF-2	2.87	3.16	3.05	2.97
CATF-3	2.87	3.13	3.04	2.97
CATF-4	2.87	3.11	3.01	2.97

Coal Consumption (TBTU)

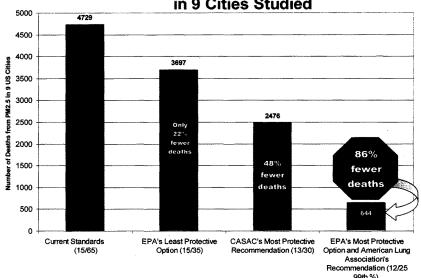
Option	2005	2010	2015	2020
Base Case	20,557	21,542	21,988	22,308
CAIR/SNPR		21,353	21,684	21,733
CATF-1	20,561	20,730	20,946	21,180
CATF-2	20,610	21,102	21,343	21,314
CATF-3	20,613	21,100	21,343	21,325
CATF-4	20,619	21,096	21,356	21,417

Regional Coal Production (million Tons)

Area	CAIR/SNPR			CATF-1			CATF-2			CATF-3			
	200	201	2015	2020	20	20	20	20	20	20	20	20	20
	0	0			10	15	20	10	15	20	10	15	20
Appalach	299	314	312	307	34	34	32	32	32	31	32	32	31
ia					0	2	1	4	9	7	3	5	5
West	131	202	215	233	21	21	22	21	22	22	21	22	22
					3	0	5	2	3	7	2	3	9
Interior	475	500	504	483	42	42	44	46	45	45	46	45	45
					4	9	6	3	1	4	5	7	4
National	905	101	1031	1024	97	98	99	99	10	99	10	10	99
		6			7	1	1	9	03	8	00	05	8

Area	CATI	₹-4	
	201	2015	2020
	0		
Appalach	322	323	314
ia			
West	208	221	230
Interior	468	461	457
National	999	1006	1002

Stronger Standards Mean Fewer Deaths in 9 Cities Studied



Source: U.S. EPA, *Particulate Matter Health Risk Assessment for Selected Urban Areas*. Appendix A. Air Quality Assessment: The PM Data. June 2005. Cities are Boston, Detroit, Los Angeles, Philadelphia, Phoenix, Pittsburgh, St. Louis, San Jose, and Seattle. All options are shown in this format: (μg/m² annual average/μg/m² 24-hour). All are at 98th percentile, except as noted.

To the Point

Talking Points for Manufacturers

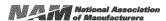
July 2006

HEALTH CARE COST CRISIS

The rising cost of health coverage is one of the biggest challenges manufacturers face today. The sources of these increases are both numerous and varied and resistant to change, but the NAM believes that aggressive action by both the public and private sectors can help reduce health costs and increase access to affordable care for all. The NAM supports providing workers and individuals with health-insurance tax credits. Other strategies include encouraging the use of Health Savings Accounts (HSAs), Health Reimbursement Arrangements (HRAs), allowing unused Flexible Spending Account (FSA) funds to roll over into the next year, and providing small businesses the ability to purchase state mandate-free health coverage through enhanced Association Health Plans. We also urge Congress to oppose any bill that will increase the cost of health coverage.

- Cost is the biggest barrier to health coverage. The best way for Congress to help business with the cost of health coverage and cover more Americans is to help make health care more affordable.
- Health information technology can help lower costs and improve the quality of care. We can no longer afford a paper-based health care system that kills nearly 100,000 every year through largely preventable medical errors.
- Intensively managing chronic health care conditions (e.g. diabetes, hypertension, asthma) can generate substantial cost savings and increase productivity. Workers must be encouraged to be more health and cost-conscious. Business also needs help to better manage catastrophic health care claims.
- Unlimited medical liability awards leads directly to higher health coverage costs and fewer health care providers willing to practice medicine. It also encourages doctors to order unnecessary and expensive tests to protect against liability. We urge Congress to pass common sense medical liability reforms.
- The Medicare reform law will help meet Medicare's immediate need for affordable prescription
 drug coverage and help Medicare prepare for its future financial challenges. The bill will also help
 employers burdened by the cost of retiree health care benefits. Politics must not get in the way of
 the new law's implementation. Future reforms should build on this important start.

These talking points are designed for communications with members of Congress. Specific company examples will give these points greater emphasis. For more information on this issue visit our website at www.nam.org or call or e-mail the NAM's Sandy Boyd at (202) 637-3133 or sboyd@nam.org.





Memorandum

December 30, 2005

TO:

Senate Environment and Public Works Committee

FROM:

James E. McCarthy

Specialist in Environmental Policy Resources, Science, and Industry Division

SUBJECT:

National Ambient Air Quality Standards

As you requested in your letter of November 17, I am providing information regarding the establishment and review of National Ambient Air Quality Standards (NAAQS). You asked six questions.

1. Who is specifically responsible for establishing and reviewing a NAAQS?

The Administrator of the Environmental Protection Agency (EPA) is responsible for establishing and reviewing a NAAQS. The procedures are established in Section 109 of the Clean Air Act [42 U.S.C. 7409]. The section requires the Administrator to promulgate NAAQS for each pollutant for which he establishes criteria under Section 108, and to review the NAAQS at five-year intervals.

The Administrator is also the responsible official under Section 108, which requires him to publish and from time to time thereafter revise a list which includes each air pollutant "emissions of which, in his judgment, cause or contribute to air pollution which may be reasonably anticipated to endanger public health or welfare" and "the presence of which in the ambient air results from numerous or diverse mobile or stationary sources."

The establishment and review of NAAQS also involves a Clean Air Scientific Advisory Committee (CASAC), but CASAC plays only an advisory role in the setting of standards. The Administrator is required, in Section 109(d)(2)(A), to appoint the members of CASAC, an independent scientific review committee composed of seven people, including at least one member of the National Academy of Sciences, one physician, and one person representing state air pollution control agencies. CASAC is required to review the NAAQS at five-year intervals and recommend to the Administrator any new NAAQS and revisions of existing criteria and standards "as may be appropriate." In practice, CASAC fulfills its obligations by reviewing and evaluating the adequacy of the key documents (the "Criteria Document"

and "Staff Paper") prepared by EPA staff as they develop or review a NAAQS. The Administrator does not propose a revision of a NAAQS until CASAC provides him what are called "closure letters," stating its consensus that the criteria document and staff paper adequately represent its views.

2. What level is the EPA Administrator required to set a NAAQS at?

Section 109 of the act sets requirements for two types of NAAQS: "primary" standards to protect public health, and "secondary" standards to protect public welfare. Primary NAAQS are required to be set at a level that protects public health with an adequate margin of safety. The exact wording, found in Section 109(b)(1), states that such standards "shall be ambient air quality standards the attainment and maintenance of which in the judgment of the Administrator, based on such criteria and allowing an adequate margin of safety, are requisite to protect the public health."

The criteria referred to are described in Section 108 of the act:

Air quality criteria for an air pollutant shall accurately reflect the latest scientific knowledge useful in indicating the kind and extent of all identifiable effects on public health or welfare which may be expected from the presence of such pollutant in the ambient air, in varying quantities. The criteria for an air pollutant, to the extent practicable, shall include information on -

- (A) those variable factors (including atmospheric conditions) which of themselves or in combination with other factors may alter the effects on public health or welfare of such air pollutant;
- (B) the types of air pollutants which, when present in the atmosphere, may interact with such pollutant to produce an adverse effect on public health or welfare; and
- (C) any known or anticipated adverse effects on welfare.

A secondary NAAQS, by contrast is to be set at a level designed to protect public welfare. According to Section 109(b)(2) a secondary NAAQS "shall specify a level of air quality the attainment and maintenance of which in the judgment of the Administrator, based on such criteria, is requisite to protect the public welfare from any known or anticipated adverse effects associated with the presence of such air pollutant in the ambient air." Examples of such adverse effects include damage to fisheries, water quality, forest resources, crops, building materials, etc.¹

3. What documents are statutorily required under the Clean Air Act to be prepared by EPA in establishing or reviewing a NAAQS?

¹ The definition of welfare effects is found in Section 302(h): "All language referring to effects on welfare includes, but is not limited to, effects on soils, water, crops, vegetation, man-made materials, animals, wildlife, weather, visibility, and climate, damage to and deterioration of property, and hazards to transportation, as well as effects on economic values and on personal comfort and wellbeing, whether caused by transformation, conversion, or combination with other air pollutants."

In Section 108, the act requires the Administrator to provide specific information regarding criteria pollutants, without specifying the form of any required documents. As described in the response to question 2, it describes at some length what the criteria shall "reflect" and "include." In response to this language, EPA develops what it calls a Criteria Document, whenever it reviews or establishes a new NAAQS. The criteria document summarizes the state of scientific knowledge regarding the effects of the pollutant in question.

A second document that EPA prepares as part of the NAAQS-setting or revision process, the Staff Paper, summarizes the information compiled in the criteria document and provides the Administrator with options. As noted in the attached CRS report, *Air Quality Standards: The Decisionmaking Process*,

... it is an administrative step designed to facilitate the EPA Administrator's decision. It lays out options for a NAAQS standard—e.g., whether to set a standard, at what level(s) it might be set, and methods for measuring compliance—along with justifications from the criteria document. Like the criteria document, the staff paper is reviewed by the scientific advisory committee.²

The staff paper has no statutory basis, but it is hard to imagine the setting of a standard without some document or documents that would serve its purpose.

Section 108 also requires the Administrator, "simultaneously with the issuance of criteria," to issue to the states and appropriate air pollution control agencies information on air pollution control techniques, including data relating to the cost of installation and operation, energy requirements, emissions reduction benefits, and environmental impact of the emission control technology. This requirement does not appear to be met by a specific document, although, generally, EPA issues a regulatory impact analysis (RIA) and technical support documents that provide this information.

Finally, Section 109 makes clear that NAAQS are to be proposed and promulgated as regulations, thus requiring their publication in the *Federal Register*. The procedural requirements are addressed in Section 307(d) of the Clean Air Act, which exempts NAAQS promulgation or revision from the requirements of the Administrative Procedure Act, but establishes its own (in most cases, similar) requirements. Section 307(d) requires the establishment of a rulemaking docket; it requires notice of proposed rulemaking in the *Federal Register*, accompanied by a statement of the proposal's basis and purpose, including a summary of the factual data on which the proposed rule is based, the methodology used in obtaining and analyzing the data, and the major legal interpretations and policy considerations underlying the proposed rule. The statement is required to set forth or summarize and provide a reference to any pertinent findings, recommendations, and comments by CASAC and the National Academy of Sciences, and, if the proposal differs in any important respect from any of these recommendations, provide an explanation of the reasons for such differences.

² Air Quality Standards: The Decisionmaking Process, by John E. Blodgett and Larry B. Parker, CRS Report 97-722 ENR, updated April 9, 2002, p. 9.

Section 307(d) also requires that any drafts of proposed and final rules submitted by the Administrator to the Office of Management and Budget (OMB) prior to proposal or promulgation, all documents accompanying those drafts, and all written comments thereon and EPA responses to such comments, be placed in the docket no later than the date of proposal or promulgation.

The promulgated NAAQS, like the proposed rule, must appear in the *Federal Register*. It must be accompanied by a statement of basis and purpose and an explanation of the reasons for any major changes from the proposed rule, as well as a response to each of the significant comments, criticisms, and new data submitted during the public comment period.

4. Statutorily under the Clean Air Act, what must the EPA Administrator consider in establishing or reviewing a NAAQS?

The considerations in setting primary NAAQS, as described in Section 109, are: 1) they are standards, the attainment and maintenance of which are requisite to protect the public health, allowing an adequate margin of safety; and 2) they are to be based on the criteria established by the Administrator under Section 108. As affirmed by the Supreme Court in Whitman v. American Trucking Associations, the Administrator may not consider costs of implementation in setting or reviewing such standards.³ Within these constraints, the Administrator is given clear discretion: the requirements are conditioned by the phrase "in the judgment of the Administrator."

The act also provides some additional information in Section 109(d)(2), where it discusses the functions of the Clean Air Scientific Advisory Committee. CASAC is directed to review the criteria and NAAQS and make recommendations to the Administrator. The Administrator does not appear to be under a legal obligation to follow CASAC's advice, but as noted in response to question 3, Section 307(d) requires the Administrator to explain the reasons for any differences from CASAC's or the National Academy of Science's recommendations.

Finally, the Administrator appears to be obliged to consider any significant comments from the public, inasmuch as he is required to provide a response to each of the significant comments, criticisms, and new data submitted during the public comment period.

5. Has the EPA Administrator ever deviated from the recommendations in the Staff Paper in establishing or reviewing a NAAQS?

The recommendations in staff papers tend to provide a range of options, so that the Administrator's choice often falls somewhere within the range discussed. For example, in 1997, when EPA last revised the PM standard, the staff paper recommended a 24-hour PM_{2.5} standard somewhere in the range of 20 to 65 μ g/m³. The Administrator chose 65 μ g/m³ as the standard. The staff paper also recommended an annual standard of 12.5 to 20 μ g/m³. The Administrator chose 15 μ g/m³.

³ 531 U.S. 457 (2001).

Congressional Research Service Washington, D.C. 20540-7000

On several occasions, the Administrator took no action, despite a staff paper recommendation. For example in 1990, a staff paper on revision of the lead standard recommended a range of standards from 0.5 to 1.5 μ g/m³ (vs. the existing standard of 1.5 μ g/m³), a monthly rather than quarterly averaging period, and more frequent sampling. EPA took no action on the recommendations, however, and never formally published a decision.

The sulfur dioxide review completed in 1996 provides a slightly different example in which the agency deviated from staff paper recommendations. In this case, the staff paper recommended three possible regulatory alternatives: 1) establish a new 5-minute NAAQS; 2) establish a new regulatory program under the general authority of Section 303 of the Clean Air Act; or 3) retain the existing suite of standards, but augment their implementation by focusing on those sources likely to produce high 5-minute peak SO₂ levels. EPA retained the existing standard and has not taken either of the other recommended actions.

6. When specifically has the EPA Administrator relaxed, strengthened, or retained a NAAQS after conducting a review?

EPA has conducted multiple reviews of the National Ambient Air Quality Standards since their establishment in 1971. The primary (health-based) standards have been strengthened twice, retained 6 times, and relaxed or revoked on 3 occasions. The results are summarized in Table 1, which provides the history of each of the seven primary NAAQS. Secondary NAAQS are not generally discussed in the table. There are no statutory deadlines for achieving the secondary NAAQS, and in many cases they are identical to the primary NAAQS, anyway. There have been some revisions of the secondary NAAQS over the years. If you wish the secondary NAAQS to be discussed at greater length in this table, please contact me.

I hope this information is useful. If you have additional questions, please call me on 7-7225.

CRS-6

Table 1. Establishment and Review of National Ambient Air Quality Standards

		*****			-	******					-
Specifics	EPA established standards for narticulate matter. The reference	method for measuring attainment was	the high-volume sampler, which	collects PM up to a nominal size of 25	to 45 micrometers. PM of this size are	referred to as "total suspended	particulates" (TSP). The primary	standards were 75 micrograms per	cubic meter (μg/m³) annual geometric	mean and 260 µg/m³ maximum 24-	
Result											
Type of Action	establish										
FR Cite	36 FR 8186										
Date of Action FR Cite Type of Result	April 30, 1971 36 FR 8186										_
Pollutant	Particulate Matter										

Pollutant	Date of Action FR Cite	FRCire	Type of Action	Result	Specifics
Particulate Matter (cont.)	July 1, 1987	52 FR 24854	review	slightly relaxed, if measured by the number of non-attainment areas, although the main purpose was to change the sixundard so as to focus efforts on particles of greatest concern	EPA changed the form of the standard from TSP to particles smaller than 10 microns (PM ₁₀), and set the primary standards at 50 micrograms per cubic meter (µg/m²) amnual arithmetic mean and 150 µg/m² maximum 24-hour concentration, not to be exceeded more than once per year. Depending on the sources of particulates in a specific area and whether the particles were predominantly large or small, the standards could have been considered strengthened or weakened. Under the former (TSP) standard, there were 93 nonattainment areas; under the PM ₁₀ standard, there were 83.

Specifics	EPA changed the form of the standard from PM ₁₀ to two categories: particles smaller than 2.5 microns (PM2 _{2,3}) and PM ₁₀ . The PM ₁₀ concentration levels remained the same, but the measure of attainment for the 24-hour standard went from one exceedance per year to the 99 th percentile averaged over 3 years. This made the standard "more robust," meaning that it would be more likely to identify areas with continuing problems, and would exclude areas with rare exceedances caused by unusual events; but it reduced the likely number of nonattainment counties from 46 to 16. The PM _{2,5} standards were set at 15 µg/m³ amual arithmetic mean, and 65 µg/m³ over 24 hours, measured as the 3-year average of the 98 th percentile of 24-hour	EPA initially established NAAQS for photochemical oxidants. (Ozone is the most significant of these, accounting for at least 2.03 of the total.) Both the primary and secondary NAAQS were 0.08 ppm, not to be exceeded more than one hour per year.
Result	strengthened overall, although the PM ₁₀ portion of the standard was relaxed as measured by the number of counties in nonattain-ment	
Type of Action	review	establish
FR Cite	62 FR 38652	36 FR 8186
Date of Action FR Cite	July 18, 1997	April 30, 1971
Pollutant	Particulate Matter (cont.)	Ozone / Photochemical Oxidants

Pollutant	Date of Action	FR Cire	Type of Action	Result	Specifies
Ozone/ Photochemical	Feb. 8, 1979	44 FR 8202	review	relaxed	Standard was changed to 0.12 ppm and the indicator was changed to ozone.
Oxidants (cont.)	March 9, 1993	58 FR 13008	review	retained	
	July 18, 1997	62 FR 38855	review	strengthened	EPA changed the form of the primary and secondary standards from 1-hour average to 8-hour average and lowered the standard from 0.12 ppm to 0.08 ppm.
Hydrocarbons	April 30, 1971	36 FR 8186	establish		EPA established a NAAQS for hydrocarbons "for use as a guide in devising implementation plans to achieve oxidant standards." The standard was 160 µg/m, (0.24 ppm) maximum 3-hour concartation (6 to 9 a.m.) not to be exceeded more than once per year.
	January 5, 1983	48 FR 628	review	revoked	Based on a review of the literature, EPA concluded that "hydrocarbons as a class do not appear to cause adverse health or welfare effects at the present ambient air levels. Thus, there is no direct health or welfare basis for retaining the NAAQs for hydrocarbons. Nonetheless, hydrocarbons should continue to be controlled or restricted because of their contribution to the formation of

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Pollutant	Date of Action FR Cite	FRCite	Type of Action	Result	Specifics
Sulfur oxides (measured as sulfur dioxide)	April 30, 1971	36 FR 8186	establish		EPA established primary NAAQS at 80 µg/m² (0.03 ppm) annual arithmetic mean, and 365 µg/m³ (0.14 ppm) maximum 24-hour concentration not to be exceeded more than once per year.
	1984		no action		EPA prepared a criteria document and staff paper on SO, in the early 1980s. The staff paper, completed in November 1982, stated that, in addition to retaining an annual standard, "consideration of a new peak (1-hour) SO ₂ standard is also recommended," with a range of "levels of interest" from 0.25 to 0.75 ppm. The paper went on to say, however, that a variety of factors, including the substantial improvements likely in information on 1-hour effects over the next few years, "permits consideration of reaffirming the existing SO ₂ standards as a reasonable policy option." According the existing SO ₂ standards as a reasonable policy option." According the above information and decided, at that time, not to propose any revision of the above information and decided, at that time, not to propose any revision of the standards." These suries.
			***************************************		Standards. There was no Fr. Houce formally announcing a decision.

Pollutant	Date of Action FR Cite	FIR Cire	Type of Action	Result	Specifics
Sulfur oxides (measured as sulfur dioxide)	April 26, 1988	53 FR 14926	no action		In 1986, EPA produced addenda to the 1982 criteria document and staff paper on SO ₂ . The revised staff paper
(cont.)	***************************************				concluded that, "The more recent data provide additional support for the earlier staff recommendations
nocono vida in portino de la constanta de la c					regarding consideration of a new 1-hour SO ₂ standard." The staff revised
	*******************************				the range of potential 1-nour levels of interest to 0.2 to 0.5 ppm. On April 26, 1988, however, the Administrator
	***************************************				proposed not to review the SO ₂ standards. There was no final decision,
					however, until EFA conducted a further review in the 1990s, described
	-				below.

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Pollutant	Date of Action FR Cite	FR Cite	Type of Action	Result	Specifics	a sale at a sale at a
Sulfur oxides (measured as sulfur dioxide) (cont.)	May 22, 1996	61 FR 25566	review	retained	EPA decided that revisions to the NAAQS were not appropriate, aside from several minor technical changes. The agency considered but rejected the idea of establishing a NAAQS to address peak 5-minute concentrations of SO ₂ . The American Lung Association and the Environmental Defense Fund sought judicial review of EPA's decision not to establish a 5-minute SO ₂ . NAAQS. On January 30, 1998, the court found that EPA had failed to provide an adequate explanation for its determination that no revision to the SO ₂ standard was appropriate and remanded the case to EPA. EPA is still in the process of responding to the remand.	
Nitrogen dioxide	April 30, 1971	36 FR 8186	establish		EPA established a primary standard of 100 μg/m² (0.053 ppm) annual arithmetic mean.	

CRS-12

Congressional Research Service Washington, D.C. 20540-7000

In its review of the standard, EPA's staff paper recommended that the Administrator select an annual standard at some level between 0.05 ppm and 0.08 ppm. Some consideration was given to the need for a shorter term standard as well, but the staff concluded (and CASAC concurred) that an annual standard in the cecommended range would provide a recommended range would provide a reasonable level of protection against short-term peaks. EPA retained the While retaining the primary standard, EPA revoked the secondary standard for CO due to lack of evidence of adverse welfare effects at or near ambient CO levels. EPA established an 8-hour primary standard of 10 µg/m³ (9 ppm) and a 1-hour primary standard of 40 µg/m³ (35 ppm). In its review of the standard, the EPA staff paper noted that the available scientific and technical information remained largely unchanged since the 1985 review, and made the same recommendation as in 1985. Specifics standard. retained primary standard retained retained Result Type of Action establish review review review 50 FR 25532 61 FR 52852 50 FR 37484 36 FR 8186 Date of Action | FR Cite October 8, 1996 September 13, 1985 April 30, 1971 June 19, 1985 Nitrogen dioxide (cont.) Carbon monoxide Pollutant

CRS-13

Congressional Research Service Washington, D.C. 20540-7000

Pollutant	Date of Action	FR Cite	Type of Action	Result	Specifies
Carbon monoxide (cont.)	August 1, 1994	59 FR 38906	review	retained	EPA retained both the 1-hour and 8-hour primary standards without changes.
	2900		review	no decision	EPA completed a criteria document in August 2000 and had a staff paper ready for public review at that time. However, Congress directed the agency to fund a study by the National Academy of Sciences to investigate the impact of very cold temperatures and topography (particularly in Fairbanks, Alaska) on the formation and ambient levels of CO, before finalizing the review. That study is now complete and EPA intends to update the 2000 criteria document as a first step in completing its review.
Lead	October 5, 1978	43 FR 46246	establish		As the result of a law suit filed by the Natural Resources Defense Council and others (NRDC v. 17rain, 411 F. Supp. 864 (S.D.N.Y. 1976)), EPA was ordered to list lead as a criteria pollutant and to develop NAAQS. The agency listed lead March 31, 1976, and on October 5, 1978, established a primary standard of 1.5 µgm³ averaged over a calendar quarter.

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Pollutant	Date of Action FR Cite	FR Cite	Type of Result		Specifics
Lead (cont.)	1986, 1990		review	no decision	EPA conducted a review of the lead standard and issued a criteria document
***************************************					in 1986 and a staff paper in 1990. The
					agency never completed the review, however. There was no final decision
					published in the Federal Register. As
and an analysis of the same of					Coalition for the Environment and
					others in May 2004, EPA is now under
					court order to complete a review of the
					lead standard by September 1, 2008.

Congressional Research Service Washington, D.C. 20540-7000

July 13, 2006

The Honorable Stephen Johnson Administrator U.S. Environmental Protection Agency 1200 Pennsylvania Avenue, NW Washington, DC 20460

Dear Administrator Johnson:

I am writing to express my concern about EPA's proposal to revise the National Ambient Air Quality Standard for fine particles (PM_{2.5}) that was established by EPA in 1997.

In January, EPA issued a proposal to make the <u>daily</u> standard for PM _{2.5} more stringent. At the same time, EPA proposed to not change the <u>annual</u> PM_{2.5} standard. I understand that you will make a final decision by September as to whether the standards will be changed. <u>I support the proposal to not change the annual standard and urge you to not change the daily standard either.</u>

As a local official, I support programs to ensure that air quality meets EPA standards. At the same time, I am concerned that states and local governments have not had a chance yet to take steps to comply with the PM2.5 standard that was adopted by EPA in 1997. Changing the standard before we comply with the existing standard does not make sense. Rather than changing the standard, I encourage EPA to work closely with state and local governments to ensure that all areas come into compliance with the existing PM2.5 standard. This cooperation is the best way to ensure that air quality continues to improve as quickly as possible.

Changing the PM_{2.5} standard now would not improve air quality any faster than programs to comply with the existing standard. However, changing the standard would create additional nonattainment areas, add to the work load of state and local officials who trying to comply with the existing standard, and penalize areas before they have had a chance to comply with the existing PM_{2.5} standard.

Sincerely,

(Signatures attached)

cc: Senator James Inhofe, Chairman, Senate Committee on Environment & Public Works Senator George Voinovich, Chairman, Senate Subcommittee on Clean Air, Climate Change and Nuclear Safety

Tay John mayor Willard Kadeliff, Mayor Willard Radcliff, Mayor Terry Feller, Mayor Village of Caldwell, OH Fromberg, MT Paul E Wests Paul E. Wertz, 4th Ward Councilman Ashland, OH

Johnny L. Brown, Council Member Conover, NC

Ronald Audet, Mayor Scobey, MT

Jim Galloway, District 1 Commissioner Washoe County, NV

Claime C. Westman

Mayore Meknist , lightwait briefert

Brisk audet, Mayor

Marjorie Schmidt, City Council President Jerome, ID

Elaine Hootman, Council Clerk Ashland, OH

Holuat A. Rejembeff

Vincent T. Schroeder, Commissioner Putnam County, OH

Bucht T. Schreden

Robert A. Riepenhoff, Commissioner Putnam County, OH

Tom A. Price, Commissioner Putnam County, OH

Bonnie Sue Cooper, Councilwoman Kansas City, MO

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F. H. Lawson, County Commissioner Boise County, ID

Frank Muth Frank Nutt, Dist. 6 County Councilman Spartanburg County, SC

Beamon Minton, County Commissioner Orange County, TX

Gerry Scheub, President of Board Lake County, IN

Fing I Doane Cindy Doane, Ward 1 Councilwoman Shelby, MT

Ida Hardcar Ida Hardcastle, City Council President Idaho Falls, ID

Debora Petty, Council Member Cripple Creek, CO

Alberah Speller Deborah Wallace, Ward 1 Councilwoman Aurora, CO

Fanis Bering Mayor Farris Bervig, Mayor

Alamosa, CO

Gary L. Cramer, Township Supervisor Kalamazoo Township, MI

Hay I Clamer-

Ellie Morris, Mayor City of Pearson, GA Donald W. Lochman, Dist. 7 Councilman Charlotte, NC

Frank Austino, Councilman Atlantis, FL

J.D. Magone, Mayor Deer Lodge, MT

Jim Bush, Mayor Pro Tem Waco, TX

Jimmy Odom, Mayor Belton, MO

Detroit, Ml

JoAnn Watson, Council Member

John K. Godfrey, III, Mayor Battle Creek, MI John Peccia, Mayor Harlowton, MT

John Prinkki, Commissioner Carbon County, MT

Kenneth A. Bender, Mayor City of Ontario, OH

Kemett a. Bander

Ackie Kuntz, Council President City of Wolf Point, MT

Annie M. Mickens, Mayor Petersburg, VA

Kenneth Huckaby, County Representative Spartanburg County, SC Mark Weidemyre, President of Council City of Ontario, OH

Sharon Smith, Chairperson Venango County, PA

Mary Staib, Councilwoman City of Brooksville, FL

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Gary Hutchison, County Commissioner Venango County, PA

Paul E. Zimbar, Councilman Borough of Catasaqua, PA

Larry E. Horn, County Commissioner Venango County, PA

Yarry & How

Rock Adams, Dist. 4 County Councilman Spartanburg County, SC

Vincent J. Ahbato, Mayor Green Tree, PA

Scott Douglass, Mayor City of Clarkson Valley, MO

Robert L. Proud, Board Vice President Clermont County, OH

Correlman Tong That
Tony Trout District 18 Councilman

Tony Trout, District 18 Councilman Greenville, SC

William D. Rung, County Administrator Grayson County, VA

William D. Raig

Just howell.

R. Scott Croswell, County Commissioner Clermont County, OH

Naryl Walker

Mary C. Walker, Board President Clermont County, OH

William Bell Myby

William Nyby, County Commissioner Sheridan County, MT

Paddy Trusler, Commissioner Lake County, MT

William V. Bell, Mayor City of Durham, NC

Hay L. Hudson Si Gary Hudson, Sr., Board President Monroe County, OH

Scott A. Wendt, Supervisor

Perry Township, PA

Bian & Hoffman Brian Hoffman, Supervisor Perry Township, PA

Elmer Brosius, Supervisor Perry Township, PA



The Honorable Stephen Johnson Administrator U.S. Environmental Protection Agency Ariel Rios Federal Building 1200 Pennsylvania Ave NW Washington, DC 20460

July 6, 2006

American Electric Power 1 Riverside Plaza Columbus, OH 43215-2373

Michael G. Morris Chairmen of the Board President and Chief Executive Officer

814-716-1100

Dear Administrator Johnson:

I am writing to express my concern about EPA's proposal to revise the National Ambient Air Quality Standard for fine particles (PM2.5) that was established by EPA in 1997.

American Electric Power (AEP), the largest coal-fired electricity generator in the United States, operates in eleven states. Reliance on coal allows AEP to provide affordable electricity to our residential, commercial and industrial customers. AEP has reduced its emissions substantially over the years to comply with clean air requirements, and strongly supports cost-effective measures to ensure that air quality meets EPA standards. We have completed measures over the past decade to reduce SO_2 and NO_x emissions from our power plants at a cost of billions. To comply with EPA's Clean Air Interstate Rule (CAIR), AEP intends to spend an additional \$3.8 billion prior to 2010 to reduce SO_2 and NO_x emissions even further.

Earlier this year, your agency proposed to revise the daily standard for PM_{2.5} and retain the annual standard. AEP supports the proposal's conclusion that changes to the annual standard are unnecessary to protect public health and the environment. Unfortunately, for the reasons articulated below, we oppose the proposed revision to the daily standard and urge EPA to not only finalize the proposal to retain the annual standard but to also retain the current daily standard.

Revising the PM_{2.5} standard now will not improve air quality or provide health benefits faster than achieving timely attainment of the existing standard. AEP and the electric power sector will achieve substantial emissions reductions to meet the ambitious reduction deadlines imposed by CAIR. Other industries also are achieving emission reductions required by other federal control programs. While these emission reductions are being achieved pursuant to federal requirements, states are in the process of developing local implementation plans to demonstrate how they will achieve compliance with the existing PM_{2.5} standard by 2010. As a result, it remains premature to revise the existing standard before we comply.

An analysis for industry associations of the impact of the proposed standards (based on 2004-2005 air quality data) shows the number of non-attainment counties significantly increasing from slightly more than 100 currently to over 500 with the 35 ug/m³ proposed 24-hour standard, and to about 630 with addition of a 14 ug/m³ annual standard. Your proposals would cause a significant increase in the

number of non-attainment counties in almost all of the states in which AEP operates, further complicating the efforts by those states to develop plans to address current non-attainment areas.

A non-attainment designation also discourages new industry from locating within such areas and may prevent existing industries from expanding, both of which have significant impacts on jobs and local economies. The additional requirements imposed on industrial sources within these areas may cause some facilities to shut down and relocate, leading to an erosion of jobs. The prospect of lost jobs and wages, and increased costs for energy and consumer products are far more certain than are any health benefits to be derived from EPA's proposed standards.

Moreover, the current science does not justify revising the existing standard. For example, the health risks that remain after the existing standard is achieved are estimated to be lower now than EPA's estimates in 1997 when the PM_{2.5} standard was established. Rather than revising the standard, we urge EPA to complete the research that is necessary to identify the constituents of PM_{2.5} that pose the greatest health risk and to target the most harmful constituents for further regulation. Controlling these harmful constituents is the most effective way to ensure that public health is protected.

Lastly, revising the $PM_{2.5}$ standard would create additional regulatory uncertainty for the electric generating sector. This result is directly contrary to one of the major goals of the President's Clear Skies initiative to provide regulatory certainty and cost-effectively reduce power plant emissions, which AEP strongly supports. Revising the $PM_{2.5}$ standard would also complicate the permitting of new generation facilities, ranging from delays in permitting to changes in the design or siting of new plants, depending upon their location and the design or type of plant.

Thank you for considering my concerns over your proposal to revise the daily standard for PM_{2.5} and I look forward to working with you on this and other matters in the future.

Sincerely.

Mike Morris

Chairman, President & CEO

cipe ham

Copy to:

Senator James Inhofe

Chairman, Senate Committee on Environment & Public Works

Senator George Voinovich

Chairman, Senate Subcommittee on Clean Air, Climate Change and Nuclear Safety



THE ASSOCIATED GENERAL CONTRACTORS OF AMERICA

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STEPHEN E. SANDHERR

703-837-5312 (Direct) 703-837-5400 (Fax)

July 12, 2006

The Honorable Stephen L. Johnson Administrator U.S. Environmental Protection Agency Ariel Rios Building 1200 Pennsylvania Avenue, NW Mail Code 1101A Washington, DC 20460

Dear Administrator Johnson:

I am writing on behalf of the Associated General Contractors of America (AGC) regarding EPA's proposed revisions to the existing National Ambient Air Quality Standards (NAAQS) for particulate matter (PM). The proposal would greatly increase the stringency of the PM NAAQS at a time when implementation of the current standard is just beginning and despite key uncertainties in the underlying science. AGC is interested in this rulemaking because a "nonattainment" designation under the Clean Air Act (CAA) may result in construction bans in geographic areas so designated by EPA, which would have a negative effect on employment, gross domestic product, manufacturing shipments, the completion of critical infrastructure projects, and the delivery of important public services.

AGC is the oldest and largest trade association in the construction industry. It has more than 32,000 members and 98 state and local chapters throughout the United States. This number includes more than 7,000 of the nation's leading general construction contractors and 25,000 specialty contractors and other firms, engaged in the construction of buildings, highways, utilities, and federal projects. In building our quality of life, AGC members own and operate diesel-powered construction equipment and rely on federal highway funds to construct road and transportation projects.

EPA Proposal

EPA's proposal would cut the allowable concentration of fine particles in the air averaged over 24-hour periods almost in half, from 65 micrograms per cubic meter ($\mu p/m3$) to 35 $\mu p/m3$. This change would increase the number of counties in nonattainment (i.e., areas where pollutant concentrations exceed the standard, or contribute to exceedance of the standard in adjoining counties) from 208 under the current standard to at least 283. These numbers may seem small compared to the approximately 3,000 counties in the United States, but the nonattainment counties tend to have larger populations than those in attainment: 88 million people (about 30 percent of the U.S. population) live in the 208 counties currently designated nonattainment.

Building Your Quality of Life

Also, EPA has proposed a 24-hour standard for PM10-2.5. That standard would be set at a level of 70 µg/m3, compared to the old 24-hour PM10 standard of 150 µg/m3. Significantly, the new PM10-2.5 standard would focus on construction sources in urban areas, excluding any mix of particles "dominated by rural windblown dust and soils and PM generated by agricultural and mining sources." Under the proposal, EPA would revoke the *annual* PM10 standard.

AGC remains concerned that the timeframe for this action is being dictated by a consent decree stemming from a lawsuit between the American Lung Association, a coalition of environmental organizations (including Sierra Club and Natural Resources Defense Council), and the EPA. Under the terms of that consent decree, the EPA has until September 14, 2006, to promulgate final revisions to the PM NAAQS. This tight deadline has denied the public the ability to meaningfully participate in this standard-setting process.

Moreover, EPA only recently completed the process for designating geographical areas as attainment or nonattainment with respect to the current PM2.5 NAAQS. Right now states are developing their SIPs for how they will meet that more stringent standard; those plans are due by early 2008. It is inappropriate for EPA to revise the fine particulate rule before assessing the success of its current regulatory scheme.

Restriction on Equipment Use

As EPA continues to tighten the PM NAAQS, states are challenged to find ways to further reduce particulate pollution from mobile sources. In geographic areas that do not meet EPA's PM standards, states may attempt to directly impose requirements through their state plan for clean air (state implementation plan or SIP) on the users of diesel engines to reduce emissions from the existing fleet of construction equipment.

The CAA generally reserves for the federal government the authority to set emissions standards for either new or old engines in offroad construction equipment; a concept called federal preemption. Nonetheless, some states have attempted (or currently are attempting) to include provisions in their SIPs that appear to violate this statutory prohibition, such as operating restrictions on the use of construction equipment; requirements to retire or replace older diesel equipment; or mandates (via contract specifications or bid preferences) to retrofit old nonroad engines.

Loss of Federal Highway Funding

States that fail to develop suitable SIPs (or to meet EPA's CAA deadlines) could be subject to numerous federal sanctions, including emissions caps limiting economic development and the loss of federal highway transportation dollars. In addition, EPA's "transportation conformity" provisions can bring federal funding for road and transit projects to a grinding halt. Under the CAA transportation conformity provisions, federal departments and agencies may not approve,

permit, or provide financial support to most highway and transit projects in areas that have not attained air quality standards, unless such projects conform with the state's SIP. "Conformity" means transportation activities will not cause new air quality violations, worsen existing violations, or delay timely attainment of air quality standards in polluted areas. Failure to demonstrate conformity results in a "conformity lapse," which renders the area's transportation program and plans invalid.

Only certain types of projects can advance during a conformity lapse (e.g., safety projects and transportation control measures).

Restrictions on the use and operation of diesel equipment and the loss of highway funds are, in essence, construction bans. Leaving projects unbuilt has consequences far beyond the owner and users who are deprived of the use of that project. Construction is a major contributor to employment, gross domestic product ("GDP"), and manufacturing. In addition, construction is vital to restoring our nation's aging infrastructure and to the delivery of important public services.

Economic Impact

Any tightening of the PM NAAQS could result in construction bans that would lead to a massive layoff of construction workers and of workers who supply a multitude of materials, equipment, and services to construction. The construction industry provides employment for 7.5 million employees and 2 million self-employed workers. From May 2005 to May 2006, construction added 257,000 employees, according to the Bureau of Labor Statistics ("BLS"). Moreover, construction jobs are good-paying jobs. In May 2006, seasonally adjusted hourly earnings in construction averaged \$19.81 per hour, 18 percent higher than the average for all private industry nonsupervisory workers, according to BLS.

Any tightening of the PM NAAQS could result in construction bans that would have a negative impact on GDP, as well as, a significant loss of jobs by construction service providers. The construction industry has played a powerful role in sustaining economic growth and helping the current economic recovery. Construction makes a disproportionately large contribution to GDP. Construction spending in 2005 totaled \$1.12 trillion, including more than \$500 billion of equipment, goods, and services that generated jobs throughout the economy.

Any tightening of the PM NAAQS could result in construction bans that would cut deeply into manufacturing shipments and return that sector into recession. Construction equipment accounted for 11 percent of manufacturers' shipments of equipment in 2005. See U.S. Bureau of the Census' Web site, online at http://www.census.gov/indicator/www/m3/prel/pdf/table1p.pdf (last visited June 29, 2006). Shipments of construction materials and supplies accounted for 11 percent of total shipments.

Air Quality Impact

Any tightening of the PM NAAQS could result in construction bans that would delay the renovation and improvement of public infrastructure, including highway and transit construction projects, bridge construction and repairs. Highway improvement projects improve traffic flows and reduce congestion, which decreases air pollution associated with idling. Emissions' rates are higher during stop-and-go, congested traffic conditions than free flow conditions operating at the same average speed. Limiting the construction of highway and transit projects would have a net negative impact on air quality. See U.S. Environmental Protection Agency, MOBILE 6.2 Model Run, 24 September 2003. See also Transportation Air Quality – Selected Facts and Figures, U.S. DOT, Federal Highway Administration, 2002; Securing America's Future: A National Commitment to Build a Highway System that Meets America's Mobility, Safety and Economic Challenges, AGC, 2003.

Public Health and Welfare Impacts

Any tightening of the PM NAAQS could result in construction bans that would delay the renovation and improvement of public infrastructure, including highway and transit construction projects, bridge construction and repairs, dam repairs, and school renovation. To this end, delaying or threatening safety-related highway projects increases potential for injuries and fatalities to the traveling public. See Traffic Safety Facts, U.S. Department of Transportation ("DOT"), National Highway Traffic Safety Administration, 2000 and 2001. One-third of the nearly 43,000 highway deaths each year can be attributed to inadequate road infrastructure. Id. Even a temporary freeze on new highway construction could prevent states from "obligating" their federal highway funds, which could, in turn, result in a loss of those federal dollars.

Any tightening of the PM NAAQS could result in construction bans that would impede projects that are vital to improving municipal water supplies and wastewater treatment facilities located throughout the nation. While drinking water quality remains good, the water infrastructure is aging rapidly. In addition, the nation's 16,000 wastewater systems face enormous needs.

Air Quality is Getting Cleaner

When considering any tightening of the PM NAAQS, along with the resultant impacts to our economy and the public's health and welfare, it is important to note that EPA's own reports have demonstrated an overall decline in particulate pollution. As EPA reported in early 2005, "between 1970 and 2004...total emissions of the six principle air pollutants dropped by 54 percent." Specifically, EPA's own studies state that the amount of fine particulates in the air is now 30 percent lower than it was 25 years ago; similarly course particulate concentrations have declined 31 percent since 1988. See The Particle Pollution Report, Current Understandings of

Air Quality and Emissions through 2003, U.S. Environmental Protection Agency (http://www.epa.gov/airtrends/pm.html), December 2004. This progress has occurred prior to implementation of the current PM NAAQS.

Moreover, EPA has projected that in many cases, PM attainment will be reached as the result of many federal measures including the "Regional Haze Rule;" voluntary diesel engine retrofit program; new federal standards on cars, light trucks, and heavy duty diesel engines that are scheduled to be implemented between 2004 and 2010; new nonroad diesel engine rules; and the 1998 regional strategy to reduce nitrogen oxides from eastern states referred to as the "NOx SIP Call."

Conclusion

AGC is concerned that a significant increase in the number of PM nonattainment areas as proposed by this rulemaking would put at risk important transportation construction projects needed to move goods and people and provide employment. Further, potential restrictions on the use and operation of diesel equipment would leave other important construction projects unbuilt, including those to provide for safe drinking water, wastewater and stormwater management, flood control and navigation, health care, and education.

Air quality is clean and getting significantly cleaner even as our economy continues to grow. Any tightening of the PM NAAQS will have significant consequences for many states and localities and will impact their ability to provide for economic growth and opportunity, as well as, for public health and welfare. AGC urges EPA to reconsider its proposed revisions to the existing PM NAAQS that would tighten them and allow EPA rules currently in place and future actions and voluntary initiatives to achieve PM attainment.

Sincerely.

Stephen E. Sandherr

OFFICE OF THE GOVERNOR

BOB RILEY GOVERNOR



STATE CAPITOL MONTGOMERY, ALABAMA 36130

> (334) 242-7100 Fax: (334) 242-0937

STATE OF ALABAMA

June 30, 2006

The Honorable Stephen L. Johnson, Administrator U.S. Environmental Protection Agency 1101A - U.S. EPA Headquarters - Ariel Rios Building 1200 Pennsylvania Avenue, N.W. Washington, D.C. 20460

Dear Administrator Johnson:

I am writing to you about the Environmental Protection Agency's review of the particulate matter air quality standard. As governor of Alabama, my state is directly impacted by your decision.

As you know, earlier this year, EPA proposed to modify the particulate matter (PM2.5) standard. I understand that you intend to make a final decision by September as to whether the standard will be changed. While I strongly support efforts to improve air quality and protect public health, I am concerned that EPA is considering tightening the particulate matter standard while the states are just beginning to implement the existing standard.

I am concerned that changing the standard will substantially increase the number of nonattainment counties in Alabama. A nonattainment designation carries serious consequences that impact economic growth, jobs, mobility, energy prices, consumer choices, and quality of life. There is a high degree of scientific uncertainty regarding the health effects related to PM2.5. In contrast, the enormous economic consequences of much tighter standards are indisputable.

The final decision should be based on sound science and should appropriately balance scientific uncertainty with the joint benefit of people's health and livelihood. Additionally, this decision should take into consideration the benefits to be achieved by other EPA regional air programs. With this in mind, I encourage you to not change the particulate matter standard at this time and to continue working with the states to implement the existing standard.

Sincerely.

BR/ps/ds

cc: Senator James Inhofe Senator George Voinovich



July 6, 2006

Stephen L. Johnson Administrator U.S. Environmental Protection Agency Ariel Rios Building 1200 Pennsylvania Avenue, N.W. Washington, DC 20460

Dear Administrator Johnson:

I am writing to express concern about the proposal to lower the 24-hour U.S. EPA Fine Particle Standard from 65 to 35 micrograms per cubic meter. The proposed lower standard could have serious repercussions for our company's presence in Northeast Ohio, and the economies of Northeast Ohio and the nation. There are four reasons for our concerns:

- 1. Northeast Ohio was designated in 2005 as a nonattainment area for the current annual fine particulate matter and in 2004 for the 8-hour ozone standards. Good faith efforts involving my company and many others are underway to address these challenges through our participation in the development of State Implementation Plan by the Northeast Ohio Areawide Coordinating Agency (NOACA). The business community has been advised by NOACA that the region already will have serious difficulty reaching compliance for the annual fine particle standard established in 2004 and later upheld in court. Adding noncompliance on the 24-hour fine particle standard would pose nearly insurmountable challenges to our region.
- 2. Even so, it is important to note that Northeast Ohio has made, and will continue to make, progress in improving its air quality. However, since approximately 60% of Northeast Ohio's pollutants come from outside the region, regulatory action within the region cannot bring us into compliance with ozone and small particulate standards. The results of efforts with a much broader geographic impact, such as the new CAIR standards, fuel controls, and new engine standards, must be taken into account before new standards are adopted.
- 3. We have a particular interest in seeing a compliance response that provides long term solutions. Incremental responses, such as those aimed at achieving short-term compliance on ozone and fine particulate matter standards, are likely to be very expensive, limit economic development and growth and will not be sustainable into the future. This chronic condition will create an environment of uncertainty that could accelerate the flight of private capital from the region—and most likely entirely out of the country.
- 4. We believe that the modeling used to estimate timelines for achieving compliance should also include serious analysis of economic impacts. This requires a different and more sophisticated modeling capability than is currently in use—one that can account for the complexities of current regulations across a number of pollutants with varying compliance timetables. We urge you to assist regions like ours with gaining access to such modeling capabilities, before you move ahead with changing the standards.

Alcoa

William F. Christopher Group President Aerospace, Automotive and Commond Transportation

Corporate Place 1, Suite 350 8450 Rockside Woods Blvd. S Independence, OH 44131 Tel: 1 218 641 4250 Fac: 1 216 641 5353 Stephen L. Johnson July 6, 2006 Page 2

Complying with a more stringent fine particulate standard—before we have even had the opportunity to adequately address the challenges of the current SIP processes—may be physically impossible, and have significant adverse economic impact on business in the region. The measures to achieve compliance with the current standards have the potential for unintended consequences such as higher energy costs, unemployment caused by the cost of regulatory burden shifted to businesses, as well as a direct impact on those individuals who are already having difficulty making ends meet, the poor and elderly.

We clearly support and are actively engaged in driving improvements in the regions' air quality and the commitment to meet the current standards. However, we believe regulatory decisions should be based on the best possible information to balance achieving air quality improvements with minimizing negative economic impacts on Northeast Ohio. We respectfully ask that you defer action to change the 24-hour fine particulate matter standard at this time and allow the region to evaluate the impact of meeting current standards.

Sincerely,

William F. Christopher



July 10, 2006

The Honorable Stephen L. Johnson Administrator, U.S. Environmental Protection Agency **USEPA** Headquarters Ariel Rios Building 1200 Pennsylvania Avenue, N. W. *Mail Code*: 1101A washington, DC-20460

Subject:

National Ambient Air Quality Standards for Particulate Matter (Docket ID No. EPA-HQ-OAR-2001-0017)

Dear Administrator Johnson:

I am writing to express my concern regarding EPA's proposed standards for fine particulate matter ($PM_{2.5}$). There is a high degree of scientific uncertainty regarding the health effects related to $PM_{2.5}$. In contrast, the enormous economic consequences of much tighter standards are indisputable. We therefore ask that EPA:

- 1) Maintain the annual standard at 15 ug/m3 and the 24-hour standard at 65 ug/m³,
- 2) Continue implementing the 1997 standards; and,
- 3) Continue working to develop critical information called for by the National Academy of Sciences, the Office of Management and Budget, and EPA's Office of Inspector General regarding the types of air pollutants actually related to specific health problems.

This approach would allow an informed decision to be made over the next few years as to whether and how best to revise particulate matter standards.

Minnesota Power (an ALLETE company) is an investor-owned utility providing energy services to customers in central and northeastern Minnesota and Wisconsin. The majority of MP's electric generation is coal-based, which is currently 80% scrubbed and will be 100% scrubbed before 2010. While operation of well-controlled units has contributed to MP's record of exemplary environmental performance, MP's industrial customers are high energy users and strucoling to compete in a competitive global customers are high energy users and struggling to compete in a competitive global market economy. We are concerned that any further emission reductions applicable to

electric generating units be implemented with reasonable timeframes and cost to minimize the impact to residential and industrial customers alike.

Minnesota already enjoys good air quality and is projected to meet the PM_{2.5} standards, whether EPA tightens the fine particle standards as proposed or leaves the current standards in place. We believe this reflects the progress Minnesota has made in reducing local emissions over the last twenty-five years. Air quality will continue to improve significantly due to huge pollution cuts already in the pipeline, including some ordered just within this past year. Sources located near PM_{2.5} nonattainment areas are also providing for additional emission reductions in response to new Federal regulations.

Despite these emission reduction actions, the EPA NAAQS revision proposal is projected to lead to designation of many new non-attainment areas. This will have severe consequences for utility companies, shareholders and customers (who already are facing higher energy costs), as well as our regional economy. However, these new designations of non-attainment counties will be based on ambient air quality before implementation of the new Federal regulations (like the Clean Air Visibility Rule) and are not giving consideration to resultant improvements in air quality.

While the benefits of EPA's proposal are very uncertain, the consequences of being classified as "non-attainment" for a National Ambient Air Quality Standard are far-reaching and severe. EPA's draft Regulatory Impact Analysis calculates the cost of complying with the proposed rule for five major metropolitan regions. An evaluation of this document by the consulting firm Environomics found that, if scaled up to the entire nation, the proposal would cost \$20 - \$60 billion per year (on top of roughly \$13 billion \$20 billion per year in costs for nationwide attainment of the current standard). This makes EPA's proposal the most expensive Federal regulation since the Office of Management and Budget began to compile records of regulatory costs in 1981.

A non-attainment designation discourages new industry from locating within such areas and may prevent existing industries from expanding, both of which have significant impacts on jobs and local economies. The additional requirements imposed on industrial sources within these areas may cause some facilities to shut down and relocate, leading to an erosion of jobs. The prospect of lost jobs and wages, and increased costs for energy and consumer products, is far more certain than are any health benefits to be derived from EPA's proposed standards.

Minnesota Power would welcome further discussion with you on this issue and appreciates this opportunity to describe its views on EPA's proposed particulate matter standards. If you have any questions, please contact Mike Cashin, Minnesota Power's Senior Environmental Policy Advisor, at 218-722-5642 ext. 3339.

Sincerely yours.

Don Shippar

c: Governor Tim Pawlenty
Members of U.S. Senate
Senator Mark Dayton
Senator Norm Coleman
Members of U.S. House of Representatives
Representative James Oberstar
White House
Office of Management and Budget
Council of Environmental Quality
U.S. Department of Energy
Tom Kuhn, Edison Electric Institute
Sheryl Corrigan-MPCA



The Honorable George V. Voinovich United States Senate Washington, DC 20510

June 26, 2006

Dear Senator Voinovich:

A January 17 proposal by the U.S. Environmental Protection Agency (EPA) threatens transportation improvements promised for Ohio in the 2005 reauthorization of the federal highway and transit programs (SAFETEA-LU).

The EPA has proposed tightening the existing National Ambient Air Quality Standard (NAAQS) for fine particulate matter (PM).

If the EPA's proposed PM revisions are enacted, the following counties in Ohio will be forced out of compliance with current federal clean air standards—Ashtabula, Brown, Butler, Carroll, Champaign, Clark, Clermont, Clinton, Columbiana, Cavahoga, Darke, Delaware, Fairfield, Favette, Franklin, Fulton, Geauga, Greene, Hamilton, Jefferson, Kuox, Lake, Licking, Lorain, Lucas, Madison, Mahouling, Marion, Mediaa, Mlami, Montgomery, Morrow, Ottowa, Pickawav, Portage, Preble, Ross, Sandusky, Stark, Summit, Trumbull, Union, Warren and Wood, As such, federal highway funds promised by SAFETEA-LU for projects in these areas could be withheld. Furthermore, the EPA is reportedly considering even stricter controls which could force even more counties in your state into aonattalament.

The existing PM standards, first issued in 1997, are working. The nation's air is getting cleaner as the U.S. economy and population are growing. EPA's own data reflects a 54 percent reduction in total emissions of the six principal air pollutants between 1970 and 2004. At the same time, the nation's gross domestic product increased 187 percent, vehicle miles traveled increased 171 percent and the population has grown by 41 percent. Since 1990, PM emissions have alone declined by 17 percent and there is no indication that this progress will not continue and grow. EPA's proposal comes at a time when current regulations are just beginning to be implemented and future regulatory controls (such as low-sulfur diesel fuel requirements) have yet to even be enacted.

The proposed revisions to the PM NAAQS are, in effect, changing the rules of the game while the game is still underway The proposed revisions to the FM NAAQS are, in effect, changing the rules of the game while the game is still underway. Counties and localities in your state are still designing plans to meet the existing PM standards by the federally mandated deadline of 2010. Often overlooked is the fact that jeopardizing funding for transportation projects invites significant public health and safety risks by perpetuating pollution-creating traffic congestion and retarding life saving emergency response activities and services. There is no need to pay this price when current standards are already effectively reducing PM.

The 1997 PM standards were enacted after extensive public comment and debate. At a minimum, these standards should be fully implemented before further revisions are even considered. Please urge EFA Administrator Johnson not to move forward with these proposed revisions to the PM NAAQS.

Sincerely,

T. Peter Ruane President & CEO

THE ARTBA BUILDING, 1219 28TH ST., N.W., WASHINGTON, D.C. 20007 Phone: (202) 289-4434 - Fax: (202) 289-4435 - Internet: www.artba.org

Beter Brane



July 10, 2006

The Honorable George Voinovich 317 Hart Senate Office Bldg. Washington, DC 20510

Tom Brinkman, Jr. State Representative

34th House District Parts of Hamilton County

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Committees
Commerce and Labor, Vice Chair
Local, Municipal Government and
Urban Revitalization
Public Utilities
Ways and Means

Dear Senator Voinovich:

I am writing to express my concern about the Environmental Protection Administration's proposed reductions in the 1997 National Ambient Air Quality Standard (NAAQS) particulate matter (PM2.5) standard. The Administrator has indicated that the finalized rule will be released in September 2006. Several local governments in our state that have achieved compliance with the 1997 standard will fall out of compliance if the standard is reduced.

Since the 1997 standard imposed under the Clean Air Act, there have been several new rulemakings that are just beginning to take effect with the full benefits to be realized by 2020. The EPA has indicated that national concentrations of PM 2.5 have decreased by 10 percent since 1999. The new rules; Tier 2 Mobile Source Rule, Highway Diesel Rule, Off Road Diesel Rule, Clean Air Interstate Rule, Clean Air Visibility Rule, and the Clean Air Mercury Rule are all designed to significantly reduce NOx and SO2 emissions from mobile and stationary sources. The EPA has projected that PM2.5 will also be significantly reduced over the next two decades as a result of these new rulemakings.

Our state has made substantial investments over the past 20 years to improve air quality and will continue to do so, but the additional cost to attain a lower standard prior to evaluating the impact of the new regulations puts our local economy at risk in terms of jobs, revenue, and economic growth. The EPA projects that even with these recently promulgated federal measures, a number of already well-controlled metropolitan areas will not attain the existing PM2.5 and/ or 8-hour ozone NAAQS within the 2010-2015 timeframe prescribed by EPA, and could face highway sanctions or draconian control measures.

More importantly, the existing 1997 standard was deemed protective of human health and the environment and EPA's current estimate of health effects from exposure to PM2.5 has decreased since 1997. Since 1997 he scientific uncertainties regarding PM health effects have increased, calling into question the impact of socioeconomic factors on public health in urban areas. As an elected official, I want to explore these implications as I work to allocate resources to the areas where it will be of most benefit to the citizens of our state.

I urge you to streamline the regulatory requirements under the Clean Air Act by allowing the most recently enacted air quality rules authorized by the U.S. Congress to take effect prior to any new reductions in the NAAQS PM standard. Furthermore, I am writing to request you to require the EPA to provide a rigorous cost benefit analysis of the implementation of the current PM standard by individual states and/ or local governments in conjunction with the air quality rules listed above prior to the reduction of the 1997 PM standard. Finally, I want to notify you of my support to maintain current NAAQS for PM2.5 until the full benefits of the recently enacted air quality rules are in effect.

Sincerely Yours,

Tom Brinkman, Jr. State Representative July 10, 2006

Senator George Voinovich Chairman, Senate Subcommittee on Clean Air, Climate Change and Nuclear Safety US Senate Washington, DC.

Dear Chairman Voinovich:

This letter is submitted to the Senate Subcommittee on Clean Air, Climate Change and Nuclear Safety on behalf of Catawba County, North Carolina in response to the Environmental Protection Agency (EPA) proposal to revise the primary and secondary national ambient air quality standards (NAAQS) for fine particulate matter (PM_{2.5}). In January 2006 EPA proposed retaining the level of the annual PM_{2.5} standard at 15 micrograms per cubic meter (μ g/m³) while lowering the 24-hour PM_{2.5} standard to 35 μ g/m³. EPA has also solicited comment on alternative PM_{2.5} levels of between 25 and 65 μ g/m³ for the 24-hour PM_{2.5} standard and down to as low as 12 μ g/m³ for the annual PM_{2.5} standard. It is Catawba County's understanding that EPA will make a final decision by September 2006 as to whether the standards will be changed. As to these alternatives, Catawba County strongly supports a 24-hour PM_{2.5} standard of no less than 65 μ g/m³ and an annual PM_{2.5} standard of no less than 15 μ g/m³.

Catawba County is a member of the Unifour Air Quality Committee (UAQC), a regional group representing 28 local governments in North Carolina, including 4 counties and 24 municipalities. The counties are Catawba, Burke, Caldwell and Alexander and the municipalities include Hickory, Morganton, Lenoir and 21 others. Collectively, this geographic region is known as the Unifour Area.

The UAQC meets monthly to discuss air quality issues and to implement measures to improve air quality in the region. They have hired technical consultants and legal assistance to provide participants with guidance and expertise. The UAQC is also a stakeholder in the Centralina Clean Fuels Coalition and participates in SEQL (Sustainable Environment for Quality of Life) funded by EPA through Centralina Council of Governments and other regional and state forums. The Unifour Air Quality Oversight Committee (UAQOC) consists of ten elected officials from Alexander, Burke, Caldwell and Catawba Counties to deal with legal and financial issues. I have served as chair of the UAQOC since its inception. Funding for the region's Air Quality program is provided from the Greater Hickory Metropolitan Planning Organization and the Unifour Rural Planning Organization. As an indicator of the amount of support local governments give to the Air Quality program, they collectively also provide funding directly to the region's air quality program based on per capita population.

Since its inception the UAQC had been dealing with the region's ozone pollution problems. These local governments have previously acted together to institute clean air initiatives, including the negotiation and signing of an "Early Action Compact" (EAC) for the purpose of responding to ozone pollution concerns. The EAC provides a mechanism for local governments, private businesses and public to implement policies

that reduce ozone levels in the region. The EAC appears to be working as both monitors in the region have had no ozone violations over the past two years. EPA, in fact, has specifically sited our EAC in the Federal Register as being "ahead of the game" when it comes to ozone emissions reductions.

In 2003, as Catawba County and the UAQC became aware of the possible violation with respect to the PM2.5 monitor in Hickory, all members of the UAQC agreed that it would also tackle PM_{2.5} issues. In December 2004 Catawba County was deemed nonattainment for the annual PM2.5 standard. At the next UAQC meeting after the designation, all local governments and UAQC members in the Greater Hickory region, whether they were located inside or outside of Catawba County (i.e. local governments in Alexander, Burke and Caldwell Counties) all again affirmed that the entire region should work together to help reduce PM2.5 levels. Thus, in a similar fashion to the UAQC's commitment to reducing ozone levels, all UAQC members believe that it is in the best interest of the region as a whole to work together to reduce PM2.5.

As noted by EPA's proposal to alter or retain the PM standards, a variety of national and regional regulations will cause major reductions in PM_{2.5} levels in the next 10-20 years. Among these are the Clean Air Interstate Rule, EPA's Clean Diesel Rules, EPA's Acid Rain program, North Carolina's 2002 Clean Smokestacks Act, North Carolina's Inspection and Maintenance Program, 2 increased enforcement against open burning3 and, as above, the Unifour Area's activities under the Early Action Compact (EAC), among other initiatives.4 As EPA has indicated, communities such as the Unifour Area that have implemented EAC's "will bring sustainable health and environmental improvements to their residents sooner than would have been achieved without these agreements."5

Under the act, North Carolina's utilities must reduce actual emissions of nitrogen oxides (NOx) from 245,000 tons in 1998 to 56,000 tons by 2009 (77% reduction). Utilities also must reduce actual sulfur dioxide (SO₂) emissions from 489,000 tons in 1998 to 250,000 tons by 2009 (49% reduction) and 130,000 tons by 2013 (73% reduction). This represents about a one-third reduction of the total NOx emissions and a one-half reduction of the total SO₂ emissions from all sources.

¹ The Clean Smokestacks Act requires significant actual emissions reductions from coal-fired power plants in North Carolina. Acceding to the Clean Smokestacks Factsheet:

Importantly, as noted in that same Factsheet, "[t]he cuts in both SO2 and NOx emissions will reduce acid rain and serve as a significant step toward meeting the new fine particle and ozone standards throughout North Carolina. See "Key Facts about the Clean Smokestacks Act," as published by North Carolina Division of Air Quality (NC

DAQ) at http://daq.state.nc.us/news/leg/stackfacts.shtml (the "Clean Smokestacks Factsheet").

This program will result in the reduction of emissions from cars and trucks, which account for about one-third of the ozone-forming emissions in North Carolina and up to 70 percent in urban counties. It requires the use of cleaner-burning, low-sulfur gasoline statewide starting in 2006, provides more incentives for alternative fuel vehicles and increases funding for rail and mass transit. See NC DAQ news releases of February 9 and June 25, 2004 at http://daq.state.nc.us/news/aireffs_2000.shtml and

http://daq.state.nc.us/news/pr/2004/obd_exp_06252004.shtml, respectively.

3 See NC DAQ program information at http://daq.state.nc.us/enf/openburn/

⁴ See Summary of North Carolina's Clean Air Efforts at http://daq.state.nc.us/news/aireffs 2000.shtml.

⁵ See "Fact Sheet - Proposed Rule to Defer the Effective Date for 8-hour Ozone Standard Non-attainment designations for early Action Compact Areas," which is published at http://www.epa.gov/ttn/oarpg/t1/fact_sheets/eaca_fs.pdf.

The regulatory initiatives underway also include, of course, regulations implementing the current NAAQS in $PM_{2.5}$ nonattainment areas including Catawba County. These initiatives require direct $PM_{2.5}$ controls in nonattainment areas including new source review (NSR) permitting requirements for new or modified sources, prevention of significant deterioration permitting, nonattainment NSR permits, minor NSR permits and whatever measures North Carolina determines are necessary in its mandatory revision of its state implementation plan (SIP).

Each of these requirements and any future SIP revisions will place a significant economic burden on Catawba County, other nonattainment areas and the regions that surround them. The Unifour Area in particular will suffer due to the restrictions these measures now impose on a region that was already experiencing a struggling economy and is now further limited in its ability to attract new businesses and industries that could improve local economies.

Between second quarter 2000 and fourth quarter 2005, the Unifour area lost over 25,000 jobs, primarily in the manufacturing sector (mostly in the apparel, coaxial cable, furniture and textile sectors), due to weak economic conditions and foreign competition. As the region and Catawba County tries to recover from the loss of nearly 1 out of 7 jobs in the past four years, the stigma of the PM_{2.5} nonattainment designation is having a severe detrimental effect on recovery efforts and, in fact, has cost Catawba County even more job losses. These losses have in turn put a severe strain on local government budgets since 2001.

According to the president of Catawba's County Economic Development Commission, several large economic development projects have turned away from moving to Catawba County due in part to the nonattainment status in Catawba County. For example, consultants responsible for the location of a large automobile manufacturing facility did not choose Catawba County in part due to the PM_{2.5} nonattainment status. This cost the Catawba County over 500 jobs and millions of dollars of lost revenue. There is no question that lowering the annual or the daily PM_{2.5} standard would only make it even more difficult to recruit new business and industries to Catawba County.

In addition to the applicable regulatory programs, local initiatives will also have a marked impact on PM levels. One such initiative was to improve traffic signalization along US Highway 321 in Hickory, which is located less than one-quarter of a mile from the monitor and is the second busiest thoroughfare in Catawba County behind Interstate 40. Completed in May 2006, it is hoped that improving traffic flow near the monitor will help to reduce PM_{2.5} levels. The region also hopes to reduce PM_{2.5} levels through increased use of biodiesel. The region's first biodiesel manufacturing facility is expected to open in August 2006.

Catawba County has been diligent in attempting to gain information from EPA relative to what is causing the $PM_{2.5}$ readings and how to mitigate the situation. County officials met with EPA officials in Washington in March of 2005 to discuss these issues. As a result of the meeting, the County sent a communication to Mr. Robert Meyers, Associate Assistant Administrator in the Office of Air and Radiation, asking for specific

information. A response from Mr. Meyers was not received by the County until October of 2005. The response did not answer our questions relative to the cause of PM_{2.5} nor did it supply us with any measures that could be taken to mitigate the situation.

In November 2005 Catawba County and the UAQC, along with support from Senators Burr, Dole and Congressman McHenry asked EPA to designate Catawba County as a pilot project area for developing and funding local strategies to reduce PM_{2.5} as quickly as possible. Unfortunately, despite the County's and the region's best efforts, EPA still has provided no real guidance on how to reduce PM_{2.5} levels locally even though the current standards were established back in 1997. Catawba County has also received no assistance on determining the source of our PM_{2.5} problems locally. To make matters worse, PM_{2.5} levels have been on the rise in the County over the past year. The PM_{2.5} annual average for Catawba County rose from 15.00 in 2004 to 15.95 in 2005. EPA has yet to explain to us why this increase occurred.

Frustrated by EPA's lack of response, in March 2006, UAQC issued a request for qualifications (RFQ) from organizations or individuals that would study and identify specific sources of $PM_{2.5}$ in the Unifour Area as well as to provide assistance in developing local mitigation strategies to reduce $PM_{2.5}$ levels. Since these local initiatives have only just begun, their future impact and success is not known. As such, it would be hasty and inappropriate to further encumber local governments with additional regulatory burdens by lowering PM levels until there is a demonstrable need for such regulatory action.

With all of the air quality initiatives currently underway, particularly the stringent restrictions placed on nonattainment areas including Catawba County, combined with initiatives planned but not yet implemented, the region will undoubtedly realize further significant reductions in PM levels. EPA should allow the current regulatory programs such as the Clean Air Interstate Rule and local initiatives to run their course over the next five to ten years before lowering the PM NAAQS even further. Until these programs and initiatives have commenced and have had a meaningful opportunity to realize results, it cannot be fairly said that lowered PM NAAQS are either necessary or desirable.

For the reasons outlined above, nonattainment designations are particularly burdensome for local governments. Catawba County, with assistance from the UAQC, is working diligently to achieve compliance with the current annual PM $_{2.5}$ standard and improve the air quality of all residents. If that standard or the 24-hour average standard were to be further reduced, it would drive local governments in nonattainment situations further into the onerous cycle of expending resources to achieve attainment, while simultaneously being hindered in their ability to effectively generate those resources due to the severe restrictions nonattainment status places on new and growing industries. This issue is even more acute for Catawba County, which is currently extremely close to achieving attainment with the annual average PM $_{2.5}$ standard of 15 μ g/m 3 . Were EPA to lower the standard it would negate all of Catawba's efforts to date and have an obvious negative impact on the local economy.

In sum, we ask that EPA carefully consider whether further reductions of any PM standards are necessary at this time, particularly in light of the numerous and varied initiatives outlined above that have recently come into effect or are currently underway. Until these programs are borne out and the full impact of their implementation is realized, there is no need to further burden local governments that are already under great financial strain in trying to achieve attainment with the current PM standards. For that reason, Catawba County specifically opposes EPA's proposal to lower the 24-hour average PM_{2.5} standard to 35 μ g/m³ and supports EPA's proposal to retain the annual average PM_{2.5} standard at 15 μ g/m³. Catawba County appreciates your kind consideration of our comments and concerns.

Sincerely,

Kitty Barnes, Chair Catawba County Board of Commissioners

Copy to:

Senator James Inhofe Chairman, Senate Committee on Environment & Public Works

Senator Tom Carper Ranking Member, Senate Subcommittee on Clean Air, Climate Change and Nuclear Safety

Senator James Jeffords Ranking Member, Senate Committee on Environment & Public Works

Senator Elizabeth Dole North Carolina

Senator Richard Burr North Carolina

Congressman Patrick McHenry 10th Congressional District, North Carolina

Congressman Charles Taylor 11th Congressional District, North Carolina The Honorable Stephen Johnson Administrator U.S. Environmental Protection Agency 1200 Pennsylvania Avenue, NW Washington, DC 20460

July 12, 2006

VIA FACSIMILE: 202-501-1450

Dear Administrator Johnson.

I am writing you about the Environmental Protection Agency's review of the particulate matter air quality standard. While the Cincinnati USA Regional Chamber strongly supports efforts to improve air quality and protect public health, the Chamber is concerned that the EPA and the states have only begun to implement the existing particulate matter standard. Because there is scientific uncertainty regarding the health effects related to fine particulate matter, we urge you to continue to work to develop information regarding specific health problems before making a decision as to how best revise the particulate matter standard.

The Cincinnati USA Regional Chamber is the fifth-largest chamber in the country, with over 6,000 members, including 1,000 manufacturing companies. Our region includes 15 counties in Southwestern Ohio, Northern Kentucky and Southeastern Indiana. The Chamber has a long-standing commitment to clean air and a strong history of engagement on the issue. The Chamber was a co-founder of the Regional Ozone Coalition and continues to participate with this group; more recently, we began collaborating with OKI, the Ohio-Kentucky-Indiana Regional Council of Governments, to work with the state EPAs in our region.

The proposed lower PM 2.5 standard would mean that areas in non-attainment will remain in non-attainment for a longer period of time. The non-attainment designation is a disincentive for new business investment in our region. Our economic development team, the Cincinnati USA Partnership, has been told by national site location consultants that non-attainment areas are frequently not even included as potential locations for major new manufacturing projects. Job growth and capital investment for existing operations in our region have also been hindered by the non-attainment designation.

For these reasons, the Chamber respectfully requests that the PM 2.5 standard is not revised at this time.

Sincerely,

Doug Moormann Vice President, Government Affairs

cc: Senator George Voinovich



The Honorable Stephen Johnson Administrator U.S. Environmental Protection Agency Washington, DC

Dear Administrator Johnson:

I am writing to express my concern about EPA's proposal to revise the National Ambient Air Quality Standard for fine particles (PM2.5) that was established by EPA in 1997.

In January, EPA issued a proposal to lower the daily standard for PM2.5. At the same time, EPA proposed to not change the annual PM2.5 standard. I understand that you will make a final decision by September as to whether the standards will be changed. I support the proposal to not change the annual standard. However, I do not support the proposal to change the daily standard and urge you to not change it either.

As a local official, I support programs to ensure that air quality meets EPA standards. At the same time, I am concerned that states and local governments have not had a chance yet to take steps to comply with the PM2.5 standard that was adopted by EPA in 1997. Changing the standard before we have taken steps to meet the existing standard does not make sense. Rather than changing the standard, I encourage EPA to work closely with state and local governments to ensure that all areas come into compliance with the existing PM2.5 standard. This cooperation is the best way to ensure that air quality continues to improve as quickly as possible.

Changing the PM2.5 standard now would not improve air quality any faster than programs to comply with the existing standard. However, changing the standard would add to the work load of state and local officials who are trying to comply with the existing standard and penalize areas before they have had a chance to comply with the existing PM2.5 standard.

Sincerely,

C: Senator James Inhofe

Chairman, Senate Committee on Environment & Public Works

Senator George Voinovich

Chairman, Senate Subcommittee on Clean Air, Climate Change and Nuclear Safety

Terry L. Bralley, EDC Chairman



Tuesday, July 11, 2006

The Honorable Stephen Johnson Administrator U.S. Environmental Protection Agency Washington, DC

Dear Administrator Johnson:

I am writing to express my concern about EPA's proposal to revise the National Ambient Air Quality Standard for fine particles (PM2.5) that was established by EPA in 1997.

In January, EPA issued a proposal to lower the daily standard for PM2.5. At the same time, EPA proposed to not change the annual PM2.5 standard. I understand that you will make a final decision by September as to whether the standards will be changed. I support the proposal to not change the annual standard. However, I do not support the proposal to change the daily standard and urge you to not change it either.

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Sincerely,

C: Senator James Inhofe

Chairman, Senate Committee on Environment & Public Works

Senator George Voinovich

Chairman, Senate Subcommittee on Clean Air, Climate Change and Nuclear Safety

135 South Salisbury Street • Mockarile, N.C. 27028-2331 Phone (336) 751-3304 • Pax (336) 751-5697 E-mail: danher@dawecounty.com • Web: darecounty.com E-mail: danher@dawecounty.com • Web: darecounty.com Kansas City Power & Light

WILLIAM H. DOWNEY President and Chief Executive Officer

July 12, 2006

The Honorable Stephen L. Johnson Administrator, U.S. Environmental Protection Agency USEPA Heedquarters Ariel Rios Building 1200 Pennsylvania Avenue, N. W. *Mail Code*: 1101A Washington, DC 20480

Subject: National Ambient Air Quality Standards for Particulate Matter (Docket ID No. EPA-HQ-OAR-2001-0017)

Dear Administrator Johnson:

I am writing to express my concern regarding EPA's proposed standards for fine particulate matter (PM2s). There is a high degree of scientific uncertainty regarding the health effects related to PM3s. In contrast, as noted below in greater detail, the enormous economic consequences of much tighter standards are indisputable. We ask, therefore, that EPA: 1) maintain the annual standard at 15 ug/m³ and the 24-hour standard at 85 ug/m³, 2) continue implementing the 1997 standards; and 3) continue working toward developing the critical information called for by the National Academy of Sciences, the Office of Management and Budget, and EPA's Office of Inspector General regarding what types of air pollutants actually are responsible for specific health problems. This approach would allow an informed decision to be made over the next few years as to whether and how best to revise the particulate matter standards.

Kansas City Power & Light Company, a subsidiary of Great Plains Energy, launched a longterm energy initiative to meet the growing need for electricity in the greater Kansas City area and maintain the region's economic and environmental health. All told, our comprehensive energy program will lead to the investment of \$1.3 billion to ensure that Kansas City has reliable, affordable and clean energy to power economic growth and sustain an expanding population.

Whether EPA tightens the fine particle standards as proposed or leaves the current standards in place, air quality will continue to dramatically improve due to huge pollution cuts already in the pipeline, including some ordered just within this past year. Our company is moving forward with such steps on our own accord. Fabric filters, or baghouses, are considered BACT for PM_{2.5}. KCPL will have baghouses on Hawthorn 5 and latan 1 and 2 by 2010. KCPL also anticipates having a baghouse on La Cygne 1 by 2009. Baghouses can reduce PM_{2.5} emissions up to 99% of the filterable fine particulate matter. Despite these actions, the proposal is projected to lead to many new non-attainment areas, which will have severe consequences for our company, shareholders and customers (who are already facing higher energy costs), as well as the economy of states in our service territory.

An analysis for the American Petroleum Institute (API) of the impact of the proposed standards (based on 2004-2005 air quality data) show a significant increase in the number of non-

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attainment counties in the state(s) in which we operate: The proposed lower alternative 14/35 standard would include the Kansas City metro area as non-attainment. In addition, the 15/30 atternative standard would increase the non-attainment counties to 881, including 24 in Missouri and 6 in Kansas. Under this atternative standard the Kansas City metro area also would be in non-attainment.

The proposed changes to the PM_{2.5} standards are a potential risk to KCPL if they cause the Kansas City metro area to be classified as non-attainment. Classification as non-attainment means restrictive permitting requirements for new units or for existing units that make major modifications and stricter regulations for current facilities. Local industry and economic development can be impacted. In addition, if is also possible that we could be included in a Missouri SIP based on transport, since PM_{2.5} is known to be transported many hundreds of miles.

While the benefits of EPA's proposal are very uncertain, the consequences of being classified as "non-attainment" are far-reaching and severe. For example, EPA's inspector General has found that by 2010 industry would spend \$37 billion annually to reduce ambient PM₂₃ concentrations. This level of cost impact is supported by an evaluation by the consulting firm Environomics of EPA's draft Regulatory Impact Analysis, finding that: 1) if scaled up to the entire nation, the proposal would cost \$20 - \$60 billion per year (on top of roughly \$13 billion - \$20 billion per year in costs for nationwide attainment of the current standard); and 2) this makes EPA's proposal the most expensive federal regulation since the Office of Management and Budget began to compile records of regulatory costs in 1981.

A non-attainment designation discourages new industry from locating within such areas and may prevent existing industries from expanding, both of which have significant impacts on jobs and local economies. The additional requirements imposed on industrial sources within these areas may cause some facilities to shut down and relocate, leading to an erosion of jobs. The prospect of lost jobs and wages, and increased costs for energy and consumer products, is far more certain than are any health benefits to be derived from EPA's proposed standards.

Kansas City Power & Light would welcome further discussion with you on this issue and appreciates this opportunity to describe its views on EPA's proposed particulate matter standards. If you have any questions, please contact Paul Ling in Environmental Services at (816) 558-2899.

Sincerely yours,

Milliam H. Downey

cc: Members of U.S. Senate
Members of U.S. House of Representatives
White House
Office of Management and Budget
Council on Environmental Quality
U.S. Department of Energy
Tom Kuhn, Edison Electric Institute

Eaton Corporation Eaton Center Cleveland, OH 44114-2584 tel: 216 523-4092 fax: 216 479-7092

July 12, 2006

Alexander M. Cutler Chairman and Chief Executive Officer

Mr. Stephen L. Johnson
Administrator
U.S. Environmental Protection Agency
Ariel Rios Building
1200 Pennsylvania Avenue, N.W.
Washington, DC 20460

Dear Administrator Johnson:

Subj: Docket ID No: OAR-2001-0017

I am writing to express concern about the proposal to lower the 24-hour U.S. EPA Fine Particle Standard from 65 to 35 micrograms per cubic meter. The proposed lower standard could have serious repercussions for the economies of Northeast Ohio and the nation. Here are our major concerns:

- Northeast Ohio has already been designated as a nonattainment area for the current annual fine particulate matter and for the 8-hour ozone standards. Many of us have worked on the development of State Implementation Plan by the Northeast Ohio Areawide Coordinating Agency (NOACA). NOACA feels that the region already will have serious difficulty reaching compliance for the annual fine particle standard. Adding noncompliance on the 24-hour fine particle standard would pose nearly insurmountable challenges to our region.
- Northeast Ohio has made, and will continue to make, progress in improving its air quality. However, since approximately 60% of Northeast Ohio's pollutants come from outside the region, regulatory action within the region cannot bring us into compliance with ozone and small particulate standards. The results of efforts with a much broader geographic impact such as the new CAIR standards, fuel controls, and new engine standards must be taken into account before new standards are adopted.

Mr. Stephen L. Johnson July 12, 2006 Page Two

> Incremental responses such as those aimed at achieving shortterm compliance on ozone and fine particulate matter standards are likely to be very expensive, limit economic development and growth, and will not be sustainable into the future. This chronic condition will create an environment of uncertainty that could accelerate the flight of private capital from the region—and most likely entirely out of the country.

Complying with a more stringent fine particulate standard—before we have even had the opportunity to adequately address the challenges of the current SIP processes—may be physically impossible and may have significant adverse economic impact on business in the region. As a company headquartered here, we are concerned about our ability to attract and retain talented employees to the region if the economy is constrained by these standards.

As a member of the Business Roundtable, Eaton has committed to an 18 % reduction in greenhouse gas emissions by 2012. We have also joined the Green Suppliers Network to help reduce the environmental impact business has on the environment. We strongly support efforts to improve the region's air quality and the commitment to meet the current standards. However, we believe regulatory decisions should be based on the best possible information to balance achieving air quality improvements while minimizing negative economic impacts on Northeast Ohio. We respectfully ask that you defer action to change the 24-hour fine particulate matter standard at this time and allow the region to evaluate the impact of meeting current standards.

Sincerely,

cc:

Senator George Voinovich Joseph D. Roman



OFFICE OF THE MAYOR
JONATHAN WEINZAPFEL

ONE N.W. MARTIN LUTHER KING, JR. BLVD. - ROOM 302

EVANSVILLE, INDIANA 47708-1833

[812] 436-4962

FRA (8121 436-4968

July 13, 2006

The Honorable Senator George V. Voinovich Chairman, Clean Air, Climate Change and Nuclear Safety Subcommittee Senate Environment and Public Works Committee United States Senate Washington, D.C. 20510

Dear Senator Voinovich and Members of the Subcommittee on Clean Air, Climate Change and Nuclear Safety:

On behalf of the City of Evansville, Indiana, I appreciate the opportunity to submit this letter to the U.S. Senate Subcommittee on Clean Air, Climate Change and Nuclear Safety, and provide local government's perspective on five important and inter-related issues:

- 1) EPA's PM2.5 nonattainment designation process;
- 2) Nonattainment designations and the regional nature of pollutant transport;
- 3) The PM2.5 Implementation Rule;
- Coordination of deadlines for the Clean Air Interstate Rule and attainment demonstrations; and
- 5) Energy and environmental policies.

I am hopeful that my comments will be considered constructively as a means to help improve the U.S. Environmental Protection Agency's (EPA) performance and ultimately improve the environment.

For those of you who have not had the pleasure of living in or visiting Evansville, a little history may help you understand why these issues are so critical to our health and our economy.

The City of Evansville in Vanderburgh County, Indiana is nestled around a bend of the Ohio River and sits above an underground mountain of coal. Coal has supplied the energy to heat our homes and power our businesses for generations. The plentiful coal has been a mixed blessing. In the 19th and most of the 20th centuries, coal-fired furnaces and boilers were found in every home and building, creating clouds of smoke, soot and acid fog that plagued our City.

In 1931, Evansville passed its first smoke ordinance to address these problems. Today, we continue to strongly enforce municipal air quality regulations more stringent than state or federal requirements.

Despite our efforts, Vanderburgh County has struggled with nonattainment designations from the very beginning. We have been designated as in nonattainment for Total Suspended Particulates and PM-10; and for the 1-hour ozone standard and the 8-hour ozone standard. Most recently, we have been designated as in nonattainment of the PM2.5 annual standard. As our air quality has improved due to technological advances, pollution controls, and more stringent regulations, we have been redesignated as in attainment for all but the PM2.5 annual standard.

Today, our energy needs are fulfilled by natural gas and electricity from the area's coal-burning power plants. In fact, there are seventeen coal-fired power plants within 62 miles of Vanderburgh County's borders, although there are no such plants inside our county. Coal-fired power plants, even though they have installed billions of dollars of pollution control equipment, continue to be the largest source of air pollution in our area. That these power plants are responsible for our air quality issues is not a condemnation or an overstatement, it is a simple fact.

INCONSISTENT NONATTAINMENT DESIGNATIONS

Nearly a decade ago, in 1997, EPA first promulgated the PM2.5 National Ambient Air Quality Standard (NAAQS). The annual standard was set at 15ug/m3. On December 17, 2004, the EPA designated Dubois, Vanderburgh and Warrick Counties, as well as Montgomery Township in Gibson County, Washington Township in Pike County and Ohio Township in Spencer County as Subpart 1 nonattainment.

EPA guidance documents stated that the Evansville – Henderson Metropolitan Statistical Area (MSA) should have been the default nonattainment area. However, some counties within the MSA were spared nonattainment status although they contained power plants (Posey Co., Indiana, Henderson Co. and Webster Co., Kentucky). Gibson County is within our MSA, but only the township containing the power plant was designated as in nonattainment. Other counties outside our MSA had a township containing a power plant designated as in nonattainment while still other counties also outside our MSA and also containing power plants were left in attainment (Daviess Co., Kentucky). If you are confused, you are not alone.

In addition, EPA's former Assistant Administrator for Air and Radiation Jeffrey Holmstead had issued a memo stating that EPA would utilize 2004 annual design values in determining attainment status, however the 2003 design values were used instead. At the time of designation, Vanderburgh's monitors met the standard, but EPA used a nonattaining monitor in Dubois County – outside our MSA and barely contiguous to Warrick County – as a justification for all of Southwestern Indiana's nonattainment designations.

The State of Indiana has filed a Petition for Judicial Review in the Washington D.C. Court of Appeals, challenging the EPA's nonattainment designations of several areas for the following reasons:

- "(1) EPA arbitrarily and capriciously designated certain Indiana counties as nonattainment areas, even though Indiana contended that such counties should be designated as unclassifiable areas due to a lack of air quality monitoring data.
- (2) EPA arbitrarily and capriciously designated certain portions of Indiana counties as nonattainment areas, because such areas included power plants, while it did not designate portions of counties in adjacent states as nonattainment areas, even though the counties in the adjacent states also included power plants.
- (3) EPA arbitrarily and capriciously designated certain Indiana counties as nonattainment areas, even though air quality monitoring data indicate that such counties actually meet the PM2.5 NAAQS."

The lawsuit is still pending, but I am interested in discovering EPA's reasoning behind the nonattainment designations. From Southwestern Indiana's point of view, it appears inconsistent and illogical.

NONATTAINMENT: REGIONAL - NOT LOCAL

Consistent or not, the PM2.5 designations became effective on April 5, 2005.

As with criticism of EPA, people have tried to portray opposition to nonattainment designations as "anti-environment". Much of my distress regarding Vanderburgh's nonattainment designation is due to the fact that Subpart 1 nonattainment designations do not improve existing air quality. Nonattainment does not even prevent air quality from deteriorating because the rules apply only to major sources within the nonattainment area – not to smaller sources, not to vehicle emissions, not to emissions from neighboring counties or states and not to emissions from any new sources outside the nonattainment area.

Very simply, the Subpart 1 nonattainment designation imposed an April 5, 2010, deadline by which nonattainment areas must achieve attainment. It also requires New Source Review (NSR), use of pollution controls providing the Lowest Achievable Emission Rate (LAER), and emissions offsets for new major sources or major modifications of existing major sources within the nonattainment area.

Rather than install LAER and find emission offsets, new major sources simply opt to locate across the county line to escape these requirements – however, their emissions do not respect political boundaries. Given this reality, we are concerned about the numerous power plants and ethanol plants currently being planned for surrounding areas.

If these projects are constructed, Illinois, Kentucky or nearby Indiana counties will realize increased economic development and tax revenues while their resulting air emissions continue to travel wherever the wind blows, including to Vanderburgh County, already languishing in nonattainment.

The NOx SIP call and the Clean Air Interstate Rule resulted from EPA's understanding that ozone and PM2.5 were regional pollutants. Either emitted directly or formed by chemical reactions in the atmosphere, they can be transported over hundreds of miles.

Clearly, designating one or two counties in nonattainment ignores the regional nature of the pollutants and is ineffective in improving air quality, as well as discourages economic development within the nonattainment area. Regional problems require regional solutions.

IMPLEMENTATION RULE

Whenever EPA sets a National Ambient Air Quality Standard (NAAQS), there is also an Implementation Rule promulgated. While the NAAQS is the goal, the Implementation Rule is the means to reach that goal. The Implementation Rule provides regulatory consistency between the states and authority to require emissions reductions necessary to achieve attainment.

However, in the case of fine particulates (PM2.5), EPA set the NAAQS and designated areas as in nonattainment without having an Implementation Rule in place. EPA has had since 1997 to finalize the Implementation Rule. While the nonattainment designations were made on December 17, 2004, the draft Implementation Rule was issued on November 1, 2005, nearly a year later! As of today, nearly ten years after the NAAQS was promulgated, the Implementation Rule has yet to be finalized.

We have an attainment deadline of 2010. The clock is ticking. EPA assures us the Clean Air Interstate Rule (CAIR) and the Highway Diesel Fuel Rule will likely allow us to regain attainment status with the current standards. However, the Diesel Rule is for mobile sources while CAIR provides "cap and trade" programs mostly for electric utilities. CAIR does not address regulations for other industries that emit precursor or criteria pollutants – for that, an Implementation Rule is needed.

The NAAQS is the goal. To achieve that goal, we need Implementation Rules which will lead to reductions in pollution levels. A finalized Implementation Rule would provide a framework upon which the states could build their State Implementation Plans. State Implementation Plans would allow affected industries to know and plan for new regulatory requirements and would also allow the regulatory agencies to write rules and draft operating permits in a consistent and effective manner.

EPA has not provided an Implementation Rule to address the current PM NAAQS. EPA has not finalized any rulemakings, has not determined which pollutants will be the pollutants considered precursors, has not compiled inventories of direct PM2.5 emissions, or decided which precursor pollutants will be subject to emission inventories.

At this point, the only Implementation guidance available to the states is an April 2005 EPA memo titled "Implementation of New Source Review Requirements in PM2.5 Nonattainment Areas" which admits that the "absence of final PM2.5 implementation rule makes administering a PM2.5 nonattainment major NSR program infeasible." The memo instructs the states to "use

the PM-10 nonattainment major NSR program as a surrogate to address the requirements of nonattainment major NSR for the PM2.5 NAAQS".

In other words, for the purposes of New Source Review, pretend PM10 is PM2.5. The guidance does not address secondary PM2.5, the assumed precursor pollutants such as Nitrogen Oxides and Sulfur Dioxide, or the probability that PM2.5 is likely subject to transport over longer distances than PM10.

Ironically, much of EPA's public justification for a PM2.5 NAAQS was based on the assertions that PM2.5 was different and more dangerous to public health than PM10. However, this guidance ignores those assertions by placing underserved New Source Review on major sources of PM10, and failing to regulate PM2.5.

TIMING

The nonattainment areas must achieve attainment status for PM2.5 by April 5, 2010. To determine its attainment status, EPA will use the monitoring data from the last three full years (2007, 2008, and 2009). EPA believes the CAIR rule should enable many areas, including Vanderburgh County, to achieve the standard. The problem lies with the timing.

In Indiana, the CAIR Phase I NOx cap-in-place requirements are effective on January 1, 2009. Therefore, the data used to determine attainment will include two years before the CAIR NOx reductions are effective and one year having the benefit of the CAIR NOx reductions.

The CAIR Phase 1 Sulfur Dioxide reductions will not be effective until 2010, so those reductions will not be realized in time to help us meet the attainment deadline. This is especially worrisome because monitoring data indicates sulfates are a major component of PM2.5 in Southwestern Indiana.

This is similar to our recent experiences with the NOx SIP call and the 8-hour ozone standard. Vanderburgh and Warrick Counties were designated in Basic (Subpart 1) nonattainment of the 8-hour Ozone Standard on April 15, 2004. The pollution control equipment required by the NOx SIP call had to be operating by May 31, 2004 – approximately a month and a half later.

In September, at the end of the 2004 Ozone season, as we expected, the monitoring data demonstrated the NOx SIP call had been effective and we had met the attainment levels, but it was too late to save us from being placed in nonattainment status. The City of Evansville, Vanderburgh and Warrick Counties, the Indiana Department of Environmental Management and the EPA have been working for nearly two years to redesignate our area as in attainment. This lack of coordinated timing caused the regulatory agencies to waste their resources on a paper exercise.

I would urge EPA or Congress to move the PM attainment deadline to allow the CAIR Phase 1 Sulfur Dioxide reductions time to be effective. The monitoring data from 2010, 2011 and 2012 should be used to determine attainment. This will provide three years' of actual monitoring data gathered while CAIR and possibly a State Implementation Plan are in force. If air quality

improves more quickly, areas can petition for redesignation as soon as they are qualified, but at least areas will not be the victims of poor timing.

While the attainment deadline of April 5, 2010, is rapidly approaching, the development of an Implementation Rule is languishing. Nontheless, last December, EPA announced that it is considering a lowering of the annual PM NAAQS now set at 15 ug/m3 to 12, 13, or 14 ug/m3. At the end of 2005, Vanderburgh County's three-year design was 15.3 ug/m3. EPA also proposed to lower the 24-hour standard from 65 ug/m3 to somewhere between 25-35 ug/m3. Currently, Vanderburgh County PM monitors have a design value of 43 ug/m3. In other words, when the NAAQS are revised and become effective, if Vanderburgh County's air quality has not improved, we will continue to be in non-attainment for the annual standard and also designated as in nonattainment for the 24 hour standard.

I wholeheartedly support NAAQS which are sufficiently stringent to protect public health. Admittedly, it is beyond my ability to critically review EPA's research and advise this Subcommittee as to whether or not downward revisions to the PM Standards are justified or sufficient. However, the NAAQS are the goal and the Implementation Rules are the means by which we reach that goal.

The states must finalize their rulemakings for State Implementation Plans by April 5, 2008, but they need the Implementation Rule from EPA or they are simply guessing what will be required. In Indiana, even simple, noncontroversial rulemakings take eighteen months or more to finalize. If an Implementation Rule was issued today, it would likely take Indiana every bit of remaining time to finalize its State Implementation Plan. Instead of focusing its resources on finalizing the Implementation Rule, it seems EPA has chosen instead to spend its energies on revising the NAAQS. Both are important endeavors, but a final Implementation Rule free from the threat of litigation will have an immediate, beneficial impact.

In Evansville, we have given these issues a great deal of time and thought. We have seen the consequences of EPA's actions and policies first hand. Many of our citizens have participated in committees, attended meetings on air quality issues, and worked toward improvements. Our city and county governments, Chamber of Commerce and some of our largest industries consider improving air quality a matter of enlightened self-interest. We work closely with the State of Indiana and the counties in our region on air quality initiatives within our control.

At the present time, EPA is dealing with several major air quality regulations which have the potential to dramatically impact our lives, health, cost of energy, and economy. These initiatives include CAIR, the PM2.5 Implementation Rule, the Mercury Reduction Rule, and the revisions to the PM2.5 NAAQS.

I would urge EPA to allow the improvements expected from CAIR and the PM2.5 Implementation Rule time to become apparent before undertaking new nonattainment designations.

I would urge Congress to consider legislation to require EPA to coordinate compliance deadlines and dates. Congress should also require EPA to provide a final Implementation Rule, free from the threat of litigation, before any new nonattainment designations are made.

Congress also should consider providing comprehensive funding to install emission reduction equipment on school and public busses — or replace older busses with hybrid vehicles such as the City of Evansville has recently purchased. Assistance could also be provided to increase the energy efficiency of public buildings and the homes of low-income families. Tax incentives could be provided to encourage private carriers to install pollution controls on their diesel fleets or to proactively purchase new trucks meeting the new emissions standards. Ethanol and Biodiesel production and use should continue to be encouraged.

Finally, I would hope that Congress would allocate to EPA, the states and local governments sufficient funding for resources needed to regain attainment status. There have been cuts proposed for Section 103 and Section 105 funding which would severely impact monitoring and compliance programs. At a minimum, Section 103 and 105 funding should be maintained at their current levels. I appreciate the efforts of Senators Voinovich and Carper in support of appropriate funding levels.

EPA has a critical role to play as we address our air quality challenges and it must make its decisions based on sound science, in a consistent, effective and efficient manner. However, EPA is bound by the laws passed by Congress. It is my firm hope that Congress takes whatever legislative actions are necessary to ensure EPA has the funding and the guidelines it needs to help us address these challenges.

Sincerely,

Mayor



76 South Main Street

Anthony J. Alexander President and Chief Executive Officer 330-384-5793 Fax: 330-384-5669

June 20, 2006

The Honorable Stephen L. Johnson
Administrator, U.S. Environmental Protection Agency
USEPA Headquarters
Ariel Rios Building
1200 Pennsylvania Avenue, N. W.
Mail Code: 1101A
Washington, DC 20460

Subject: National Ambient Air Quality Standards for Particulate Matter (Docket ID No. EPA-HQ-OAR-2001-0017)

Dear Administrator Johnson:

I am writing to express my concern regarding EPA's proposed new standards for fine particulate matter (PM_{2.5}). There is a high degree of scientific uncertainty regarding the health effects related to PM_{2.5}. What is certain; however, are the substantial economic consequences the more stringent standards would cause. As a result, we believe that EPA should continue implementation of the existing 1997 PM_{2.5}15 ug/m^3 annual and 65 ug/m^3 24 hour standards and continue to develop the critical information called for by the National Academy of Sciences, the Office of Management and Budget, and EPA's Office of Inspector General regarding what types of air pollutants actually are responsible for specific health problems.

We are convinced that this approach would be the most prudent way to make an informed decision over the next few years to determine whether the particulate matter standards need to be revised at all.

Overall, air quality in the U.S. will continue to improve due to the large-scale reductions mandated by the Clean Air Interstate Rule and Clean Air Mercury Rule. Unfortunately, the new PM_{2.5} standards could delay progress by creating new non-attainment areas, which could adversely affect electric utilities and generation market prices, which have been rapidly escalating in recent years across the country.

An analysis for the American Petroleum Institute of the impact of the proposed PM_{2.5} standards (based on 2004-2005 air quality data) shows a significant increase in the number of non-attainment counties in the states in which we operate. In Ohio, the number of non-attainment counties would increase from 27 at the current standard to 44 or 49 counties depending upon if the standard is lowered to 35 or 30 ug/m³. In Pennsylvania, the non-attainment areas would increase from 21 counties to either 29 or 32, while in New Jersey the non-attainment counties would go from 12 to 19.

-2-

While the health benefits of EPA's new proposal are uncertain, the consequences of being classified as "non-attainment" are far-reaching and severe, in fact, this proposal could become the most expensive federal regulation since the Office of Management and Budget began compiling records of regulatory costs in 1981. For example, EPA's Inspector General has calculated that by 2010 our country's industries would spend approximately \$37 billion annually to reduce ambient PM_{2.5} concentrations to the proposed new levels. EPA's new proposal has been estimated to cost \$20 - \$60 billion per year by the consulting firm Environomics, on top of roughly \$13 - \$20 billion per year in costs for nationwide attainment of the current standard. Of particular concern is that these huge expenditures would not be directed at the PM_{2.5} presenting the greatest public health threat due to EPA's view that our scientific knowledge has not adequately developed to identify the "species" of PM2.5 most harmful to human health. All stakeholders share the common interest of maximizing the public health benefits of investments of this magnitude and the prudent course for EPA is to develop the scientific knowledge first and then focus on the "species" of PM2.5 that are harmful to human health.

In addition to the excessive costs, a non-attainment designation discourages new industry from locating within such areas and may prevent existing industries from expanding, both of which have significant impacts on job creation and retention. The prospects of lost jobs and wages - along with increased costs for energy and consumer products - are far more certain than are any health benefits to be derived from EPA's proposed standards.

FirstEnergy appreciates this opportunity to explain our views on EPA's proposed particulate matter standards, and would welcome further discussion about this issue with you.

Sincerely, Authory of Blyank

The Honorable George Voinovich, U.S. Senate

Tom Kuhn, Edison Electric Institute



July 11, 2006

Stephen L. Johnson Administrator U.S. Environmental Protection Agency Ariel Rios Building 1200 Pennsylvania Avenue, N.W. Washington, DC 20460

Dear Administrator Johnson:

I am writing on behalf of the Greater Cleveland Partnership (GCP), one of the nation's largest metropolitan chambers of commerce, to express concern about the proposal to lower the 24-hour U.S. EPA Fine Particle Standard from 65 to 35 micrograms per cubic meter. The proposed lower standard could have serious repercussions for many of our 16,000 member companies, particularly those involved with manufacturing, and for the economy of Northeast Ohio and the nation. As you will hear from several of our company executives, there are four reasons for our concerns:

- 1. Northeast Ohio was designated in 2005 as a nonattainment area for the current annual fine particulate matter and in 2004 for the 8-hour ozone standards. Good faith efforts involving my company and many others are underway to address these challenges through our participation in the development of State Implementation Plan by the Northeast Ohio Areawide Coordinating Agency (NOACA). The business community has been advised by NOACA that the region already will have serious difficulty reaching compliance for the annual fine particle standard established in 2004 and later upheld in court. Adding noncompliance on the 24-hour fine particle standard would pose nearly insurmountable challenges to our region.
- 2. Even so, it is important to note that Northeast Ohio has made, and will continue to make, progress in improving its air quality. However, since approximately 60% of Northeast Ohio's pollutants come from outside the region, regulatory action within the region cannot bring us into compliance with ozone and small particulate standards. The results of efforts with a much broader geographic impact, such as the new CAIR standards, fuel controls, and new engine standards, must be taken into account before new standards are adopted.
- 3. We have a particular interest in seeing a compliance response that provides long term solutions. Incremental responses, such as those aimed at achieving short-term compliance on ozone and fine particulate matter standards, are likely to be very expensive, limit economic development and growth and will not be sustainable into the future. This chronic condition will create an environment of uncertainty that could accelerate the flight of private capital from the region—and most likely entirely out of the country.
- We believe that the modeling used to estimate timelines for achieving compliance should also include serious analysis of economic impacts. This requires a different and more sophisticated

modeling capability than is currently in use—one that can account for the complexities of current regulations across a number of pollutants with varying compliance timetables. We urge you to assist regions like ours with gaining access to such modeling capabilities, before you move ahead with changing the standards.

Complying with a more stringent fine particulate standard—before we have even had the opportunity to adequately address the challenges of the current SIP processes—may be physically impossible, and have significant adverse economic impact on business in the region. The measures to achieve compliance with the current standards have the potential for unintended consequences such as higher energy costs, unemployment caused by the cost of regulatory burden shifted to businesses, as well as a direct impact on those individuals who are already having difficulty making ends meet, the poor and elderly.

The GCP clearly supports and is actively engaged in working with member companies to address the region's air quality challenges and meet current standards. However, we believe regulatory decisions should be based on the best possible information to balance achieving air quality improvements while minimizing negative economic impacts on Northeast Ohio. We respectfully ask that you defer action to change the 24-hour fine particulate matter standard at this time and allow the region to evaluate the impact of meeting current standards. Please know that the Greater Cleveland Partnership stands ready to work with your agency to address these challenges.

Sincere

Frederick R. Nance Chairman

CC: Senator George Voinovich

July 12, 2006

The Honorable Stephen Johnson Administrator U.S. Environmental Protection Agency 1200 Pennsylvania Avenue, N.W. Washington, DC 20460

Dear Administrator Johnson:

We are writing to you about the Environmental Protection Agency's review of the particulate matter air quality standard. As governors, our states are directly impacted by your decision.

As you know, EPA proposed earlier this year to modify the particulate matter standard. We understand that you intend to make a final decision by September 27, 2006. While we strongly support efforts to improve air quality and protect public health, we are concerned that EPA and the states have only begun to implement the existing particulate matter standard.

State and local governments are working on implementation plans that are currently required to be submitted to EPA in 2008 in order to comply with the existing standard. If EPA decides to change the particulate matter standard at this time, EPA should extend the deadline for filing implementation plans to allow the full benefits to be recognized from the Clean Air Interstate Rule, cleaner motor vehicle fuels and engines, and other EPA clean air initiatives.

In addition, we are concerned that changing the standard will substantially increase the number of nonattainment counties. A nonattainment designation carries serious consequences that impact economic growth, jobs, mobility, energy prices, consumer choices, and quality of life.

With this in mind, we urge you to proceed with extreme caution as you consider whether to change the particulate matter standard. The final decision should be based on sound science and should appropriately balance scientific uncertainty with the joint benefit of people's health and livelihood. Additionally, this decision should take into consideration the benefits to be achieved by other EPA regional air programs.

Sincefely.

Governor Halley Barbour

Mississippi

Governor Matt Blunt

Missouri

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Smy Bide

Governor Mitch Daniels

Indiana

Governor Mark Senford South Carolina

Governor Sonny Perdue Georgia

Bob Taft
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Ohio

RE: EPA-HQ-OAR-2001-0017

I am writing to strongly oppose the U.S. Environmental Protection Agency's proposal to revise the national ambient air quality standards for particulate matter. Neither current science nor sound public policy justifies changing the standards at this time. Instead, EPA should continue its current efforts to implement the existing standard, and give it sufficient time to take effect.

Over the last 35 years, the Clean Air Act (CAA) has helped to improve air quality even as the economy has grown at a brisk pace. Between 1970 and 2004, the U.S. population grew by 40 percent, energy consumption increased 47 percent, vehicle miles multiplied 171 percent, and the U.S. gross domestic product swelled by 187 percent. During that same period, however, total emissions of the six principal air pollutants regulated under the CAA declined. National Ambient Air Quality Standards (NAAQS) emissions have dropped 54 percent while toxic air emissions declined by 30 percent between 1990 and 1999.

EPA's efforts to reduce Particulate Matter (PM) emissions over the last nine years have been extraordinary. A large part of that success has to do with the efforts of individual states to develop the specialized tools needed to respond to local conditions. States have adopted long term development plans and emission reduction tools to achieve the greatest benefits from EPA's new programs, and to ensure improvements in, and attainment of, air quality standards. Now, EPA is rendering our efforts most

EPA's proposal will cause significant harm to the economy just as America is struggling to complete its long economic recovery. The immediate result of EPA's proposal will be to aggravate the ongoing energy crisis by ensuring further increases in the cost of electricity and gasoline. In addition, the proposed revisions will also raise the cost of doing business in America by placing onerous restrictions on the expansion of existing facilities and send even more jobs overseas. Finally, EPA's proposal will place at risk the ability of our local community to develop its economy and fully utilize the federal highway funding that Congress has provided for vital infrastructure improvements.

The ultimate cost of EPA's efforts though, will be borne not by the environmentalists who filed the law suit but rather by the American workers and local communities who will shoulder the burden of increased unemployment and significant increases to the basic cost of living.

As it reviews the current NAAQS for PM, EPA must be mindful of the tremendous progress that has been made in improving air quality and all the costs associated with further revisions to the NAAQS. I strongly urge EPA to reconsider its proposal and maintain the status quo until an adequate amount of time to judge its effectiveness has passed.

Sincerely.

Lisa Rayburn 1748 12th St Portsmouth, OH 45662-4537

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Donna Duessel 6 Raymond St Stratford, CT 06614-5228

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Elizabeth McMeekin 4325 Rosanna Dr Allison Park, PA 15101-1423

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Michael Vancil 1082 Lindendale Dr Pittsburgh, PA 15243-1965

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John Perrin 92 Heritage Hannibal, MO 63401

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William Wells PO Box 28 West Liberty, KY 41472-0028

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EPA's proposal will cause significant harm to the economy just as America is struggling to complete its long economic recovery. The immediate result of EPA's proposal will be to aggravate the ongoing energy crisis by ensuring further increases in the cost of electricity and gasoline. In addition, the proposed revisions will also raise the cost of doing business in America by placing onerous restrictions on the expansion of existing facilities and send even more jobs overseas. Finally, EPA's proposal will place at risk the ability of our local community to develop its economy and fully utilize the federal highway funding that Congress has provided for vital infrastructure improvements.

The ulfilmate cost of EPA's efforts though, will be borne not by the environmentalists who filed the law suit but rather by the American workers and local communities who will shoulder the burden of increased unemployment and significant increases to the basic cost of living.

As it reviews the current NAAQS for PM, EPA must be mindful of the tremendous progress that has been made in improving air quality and all the costs associated with further revisions to the NAAQS. I strongly urge EPA to reconsider its proposal and maintain the status quo until an adequate amount of time to judge its effectiveness has passed. Sincerely,

Dana Meintzer PO Box 2436 Easton, MD 21601-8947

RE: EPA-HQ-OAR-2001-0017

I am writing to strongly oppose the U.S. Environmental Protection Agency's proposal to revise the national ambient air quality standards for particulate matter. Neither current science nor sound public policy justifies changing the standards at this time. Instead, EPA should continue its current efforts to implement the existing standard, and give it sufficient time to take effect.

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Johnnie Aycock PO Box 020410 Tuscaloosa, AL 35402-0410

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John Kinsman 701 Pennsylvania Ave NW Washington, DC 20004-2608



MICHIGAN ASSOCIATION OF COUNTIES

935 North Washington Avenue Lansing, MI 48906 517/372-5374 Fax 517/482-4599 www.mlcounties.org

TIMOTHY K McGUIRE, Executive Director

July 10, 2006

The Honorable Senator George Voinovich, Chairman Clean Air, Climate Change and Nuclear Safety Subcommittee Senate Committee on Environment and Public Works 415 Hart Senate Office Building Washington, D.C. 20510

Dear Chairman Voinovich:

It has come to our understanding that you have invited one of our member commissioners, Lenawee County Chairman, Larry Gould to testify to your committee regarding the EPA's proposed revisions to the particulate matter air quality standards. We are certainly honored that you have asked a county commissioner from Michigan to bring some local perspective to your commission.

Michigan's Counties are very concerned with how the quality of life and environmental issues impact our collective economics. As such, MAC supports initiatives which help make Michigan a more attractive place to live, including initiatives improve the environment, making Michigan a more attractive and healthy place to live and do business.

However, a recent survey of 27 of Michigan's 83 counties shows that those counties are required by state and federal law to conduct over \$1.1 billion worth of mandated services annually, but are only reimbursed approximately \$550 million. As such, any new particulate matter standards which push costs to the counties would be impossible for us to support, unless the commensurate amount of federal funding were appropriated for us to implement those standards.

Once again, thank you for inviting one of Michigan's County Commissioners to present to your committee. If the Michigan Association of Counties can be of any assistance in your decision making process, please do not hesitate to contact me or, my Director of Legislative Affairs, Tom Hickson, at 517-372-5374.

Sincerely,

Timothy K. McGuire Executive Director

Timothy Kny my

Cc: Chairman Larry J. Gould Ms. Julie Ufner, NACo

or of Public Work

PHIL CROWE Fire Chief SENRY P. VAN HOY II

DR. E.W. SLATE Mayor

COMMENSIONS:

J.C. BUSTIER! CLEARY, Mayor Pro Tem
RICHARD BHOADWAY
WILLMAN L. (BILL) FOSTER
LASH GAITHER SANFORD; JR.
VERNON THOMPSON

CHRISTINE W SANDERS



171 CLEMENT STREET
MOCKEVILLE, NC 27028

Tuesday, July 11, 2006

The Honorable Stephen Johnson Administrator U.S. Environmental Protection Agency Washington, DC

Dear Administrator Johnson:

I am writing to express my concern about EPA's proposal to revise the National Ambient Air Quality Standard for fine particles (PM2.5) that was established by EPA in 1997.

In January, EPA issued a proposal to lower the daily standard for PM2.5. At the same time, EPA proposed to not change the annual PM2.5 standard. I understand that you will make a final decision by September as to whether the standards will be changed. I support the proposal to not change the annual standard. However, I do not support the proposal to change the daily standard and urge you to not change it either.

As a local official, I support programs to ensure that air quality meets EPA standards. At the same time, I am concerned that states and local governments have not had a chance yet to take steps to comply with the PM2.5 standard that was adopted by EPA in 1997. Changing the standard before we have taken steps to meet the existing standard does not make sense. Rather than changing the standard, I encourage EPA to work closely with state and local governments to ensure that all areas come into compliance with the existing PM2.5 standard. This cooperation is the best way to ensure that air quality continues to improve as quickly as possible.

Changing the PM2.5 standard now would not improve air quality any faster than programs to comply with the existing standard. However, changing the standard would add to the workload of state and local officials who are trying to comply with the existing standard and penalize areas before they have had a chance to comply with the existing PM2.5 standard.

Sincerely,

Christine W. Sandan Chui tire W. Sanders
Christine W. Sanders
Town Manager

July 11, 2006



P.O. BOX 15159 230 EAST TOWN STREET COLUMBUS, OH 43215-0159

614.228.4201 800.622.1893 614.228.6403 FAX

> www.ohiochamber.com occ@ohiochamber.com

The Honorable Stephen Johnson Administrator U.S. Environmental Protection Agency 1200 Pennsylvania Avenue, N.W. Washington, D.C. 20460

Dear Administrator Johnson:

I am writing on behalf of the Ohio Chamber of Commerce our state's premiere business advocacy organization. Our membership includes more than 4,000 businesses from all areas of our state and all industry sectors. We are writing to urge you to exercise extreme caution as you consider making the National Ambient Air Quality Standard for fine particulate matter more stringent.

The Ohio Chamber has always supported efforts to improve the quality of our state's air. We are proud of the fact that Ohio's air quality has persistently and dramatically improved since enactment of the federal Clean Air Act in 1970. For example, between 1990 and 2002, sulfur dioxide emissions in Ohio have dropped by 30%, particulate matter emissions have been reduced by 37%, nitrogen oxides emissions have dropped by 39%, and organic compound emissions have been reduced by 32%. We have made and continue to make significant progress.

But, unfortunately, the health of our state's economy does not match the improving quality of our air. As we have struggled to revive an economy based largely on manufacturing, the quality of life for all Ohioans has suffered. Improving Ohio's economy rests largely on our ability to expand existing businesses and bring new facilities and jobs to the state. That's why we believe the U.S. EPA's proposal to lower the level of the 24-hour fine particulate matter standard from the current level of 65 micrograms per cubic meter to 35 micrograms per cubic meter will be a major obstacle to our success. Under the proposal many Ohio counties will be designated non-attainment and as you know, a non-attainment designation carries many serious repercussions for a state's economy; repercussions that Ohio's struggling economy cannot bear.

Non-attainment areas are not attractive to new facilities or expanding businesses. The job losses from facilities in non-attainment areas that may be shutdown and the loss of investment in new facilities and new jobs will be devastating for an already precarious economy. A non-attainment designation also exacerbates our existing economic struggles by causing energy prices to increase and negatively impacting mobility and consumer choices.

Our state cannot afford to have additional counties designated non-attainment. Twenty-seven Ohio counties are already designated as non-attainment with the current particulate matter standard. The more stringent proposal will result in forty-four Ohio counties, half of our state, being designated non-attainment for 20 years.

Ohio is diligently working on a state implementation plan to comply with the existing ozone and particulate matter standards that must be submitted to U.S. EPA in 2008. Strengthening the particulate matter standard now seems a lot like moving the goalpost in the middle of the game.

The quality of Ohio's air continues to improve, but our economy is languishing. To ensure that we have both clean air and a thriving economy we need environmental regulations that are based on sound science. We need environmental regulations that balance scientific uncertainty with the health of our citizens and their livelihoods that are dependent upon the health of our economy.

Thus, we urge you to exercise extreme caution as you consider changing the current particulate matter standard. At the very least, your decision should take into consideration the benefits anticipated from other federal air programs like the Clean Air Interstate Rule.

Thank you for allowing us the opportunity to express our thoughts and concerns on this important issue.

Sincerely,

Linda Woggon Vice President, Governmental Affairs

cc: Sen. George V. Voinovich

CHAIRMAN OF THE BOARD
DAVID W. JOHNSON
CEO
Summitville Tites, Inc.
PRESIDENT
ERIC L. BURKLAND

July 10, 2006



Administrator Steve Johnson U.S. Environmental Protection Agency Ariel Rios Building 1200 Pennsylvania Avenue, N.W. Washington, DC 20460

RE: EPA's Proposed Revision to the Particulate Matter Air Quality Standard

Administrator Johnson:

I am writing to you to express the Ohio Manufacturers' Associations concern regarding Ohio EPA's proposed revision to the particulate matter air quality standard which poses to have a significant negative impact on job creation and retention in Ohio.

The OMA is a statewide organization representing over 1,800 manufacturers of all sizes throughout Ohio. Manufacturing is directly and indirectly attributable to over 50% of all jobs in Ohio and represents Ohio's largest sector of the state domestic product.

EPA's proposal to reduce the 24-hour fine particle standard from the current level of 65 micrograms per cubic meter (μ g/m3) to 35 μ g/m3 will create an unattainable standard for much of Ohio. Ohio EPA is currently struggling with a state implementation plan that will allow Ohio to achieve the current standard by 2009; this new standard will strain both logic and technical feasibility. It is expected that as many as 44 counties in Ohio could be designated nonattainment for these new standards severely restricting Ohio's ability to retain jobs and attract new investment.

Ohio's manufacturers have spent millions upon millions to comply with strict federal standards. Ohio's air quality has significantly improved in the past few decades. Responsible federal standards, programs and implementation timelines have worked well. However, this new proposal threatens to upset the balance of job creation and retention and environmental stewardship. Ohio's manufacturers are committed to improving their operations to have as little a footprint as possible on the environment. Unreasonable standards that are technically difficult or impossible to meet, regardless of cost, will do little to improve air quality and potentially jeopardize the gains Ohio has made in economic development.

The OMA stands ready to work with you and your office as the EPA promulgates improved standards. We ask only that these standards are crafted in a way that continues



Ohio's recent gains in clean air while protecting its citizens' jobs. Please do not hesitate to contact me if you have questions regarding this matter.

Sincerely

Eric Burkland President

CC: Senator George Voinovich

Robert J. Barkanic, P.E. Director-Environmental

PPL Services Corp.
Two North Ninth Street
Allentown, PA 18101-1179
Tel. 610-774-5466 Fax 610-774-5930
ribarkanic@polweb.com



July 12, 2006

The Honorable Stephen Johnson Administrator U.S. Environmental Protection Agency Ariel Rios Building 1200 Pennsylvania Avenue NW Washington, DC 20460

Dear Administrator Johnson:

I am writing to express PPL Corporation's (PPL) concern about EPA's proposal to revise the National Ambient Air Quality Standard for fine particles (PM_{2.5}).

In January, EPA proposed to revise the daily standard for $PM_{2.5}$ and, at the same time, not revise the annual standard. PPL supports the proposal's conclusion that changes to the annual standard are not necessary to ensure the protection of public health and the environment. However, we do not support the proposed revision of the daily standard but, rather, urge EPA to retain the current daily standard.

PPL is the parent company of PPL Generation LLC, an electric generating company that operates a portfolio of electric generators that includes about 6000 megawatts of coal-fired generation. Our reliance on coal has allowed PPL to provide affordable electricity to our residential, commercial, and industrial customers. PPL supports cost-effective measures to ensure that air quality meets EPA standards, and PPL has reduced its emissions substantially over the years to comply with clean air requirements. To comply with EPA's Clean Air Interstate Rule (CAIR), PPL plans to spend \$1.5 billion over the next four years to further reduce SO_2 , NO_x and particulate matter emissions to help further improve air quality.

Revising the PM_{2.5} standard would not improve air quality or provide health benefits any faster than achieving timely attainment of the existing standard. PPL and the electric power sector will achieve substantial emissions reductions to meet the ambitious reduction deadlines imposed by CAIR. Other industries also are achieving emission reductions required by other federal control programs. While these emission reductions are being achieved pursuant to federal requirements, states are in the process of developing local implementation plans to demonstrate how they will achieve compliance with the existing PM_{2.5} standard by 2010. Therefore, it is premature to revise the existing standard before we have achieved compliance with it.

Moreover, the science does not justify revising the existing standard. For example, the health risks that remain after the existing standard is achieved are estimated to be lower now than EPA's estimates in 1997 when the PM_{2.5} standard was established. Rather than revising the standard, we urge EPA to complete the research that is necessary to identify the constituents of PM_{2.5} that pose the greatest health risk and to target those constituents for further regulation. Controlling those constituents is the most effective way to ensure that public health is protected.



Lastly, revising the $PM_{2.5}$ standard would create additional regulatory uncertainty for the electric generating sector. This result is directly contrary to one of the major goals of the President's Clear Skies initiative to provide regulatory certainty and cost-effectively reduce power plant emissions, which PPL supports.

Sincerely,

Robert J. Barkanic

CC:

Senator James Inhofe Chairman, Senate Committee on Environment & Public Works

Senator George Voinovich Chairman, Senate Subcommittee on Clean Air, Climate Change and Nuclear Safety

July 12, 2006

The Honorable George Voinovich Chairman, Subcommittee on Clean Air, Climate Change and Nuclear Regulation United States Senate Washington, DC

Dear Senator Voinovich:

I understand that your subcommittee is scheduled to hold a hearing on July 13 regarding the Environmental Protection Agency's (EPA) proposed revision of the National Ambient Air Quality Standard for particulate matter. I am writing to share my perspective as a city commissioner in hopes that I can further your subcommittee's understanding of how air quality standards, especially a nonattainment designation, might affect local communities.

By way of background, I serve on the city commission for Richmond, Kentucky. We are located in Madison County in the central part of the state. Richmond's population is about 29,000. Our city prides itself on being progressive, warm and friendly. Our population growth reflects the attractiveness of Richmond. Our population grew by 6.1% from 2000 to 2003 and by 26% from 1990 to 2000. The city is governed by a Board of Commissioners made up of the mayor and four commissioners. In addition to serving as commissioners, each of us has a full-time career outside our service on the Board.

In addition to its friendliness, we are also proud that Richmond is a clean city. Eastern Kentucky University is located in Richmond. We have a variety of commercial businesses and small industry. Moreover, we are working to expand our economic base and employment opportunities.

Fortunately, Madison County is in compliance with all National Ambient Air Quality Standards, including $PM_{2.5}$. Besides contributing to the quality of life in Richmond, I believe our attainment status enables us to grow economically by offering our citizens and businesses the opportunity to live and work in a clean, business friendly city.

I am aware that the EPA has proposed to change the existing air quality standard for PM_{2.5}. It is my understanding that the change proposed by EPA might, unfortunately, lead to the designation of Madison County as nonattainment. As a city commissioner, I am very concerned that a nonattainment designation would have undesirable consequences for Richmond.

A nonattainment designation would imply that Richmond is a less desirable place to live from an environmental standpoint than it is now. However, Richmond is an environmentally clean city in virtually every respect. As a city commissioner, I have always supported efforts to improve environmental quality. If EPA changes

the PM_{2.5} standard and Madison County is designated nonattainment, the air quality in Richmond would be regarded as unhealthy. While there are many considerations that go into a decision to locate a new business or industrial facility, I am concerned that a nonattainment designation could harm Richmond's ability to attract new jobs and expand its economy.

I am aware that EPA has begun working with states to implement the $PM_{2.5}$ standard set in 1997. According to EPA, Kentucky has seven (7) counties that are classified as nonattainment for the existing (1997) $PM_{2.5}$ standard. I am also aware of estimates suggesting that as many as thirty-eight (38) counties, including Madison County, might be designated nonattainment if EPA lowers the daily and annual $PM_{2.5}$ standard. Rather than changing the $PM_{2.5}$ standard before communities have had a chance to fully implement measures to comply with the existing standard, I urge EPA to work with states to bring nonattainment areas into compliance with the existing standard as quickly as possible before any revisions to the $PM_{2.5}$ standards are considered. To do otherwise would place a significant burden on communities like ours that are working hard to ensure sustained environmental progress for our citizens.

Sincerely,

/s/

Mike Brewer Commissioner City of Richmond

Copy to:

The Honorable Stephen Johnson Administrator U.S. Environmental Protection Agency July 11, 2006

The Honorable Stephen Johnson Administrator U.S. Environmental Protection Agency Washington, DC

Dear Administrator Johnson:

I am writing to express my concern about EPA's proposal to revise the National Ambient Air Quality Standard for fine particles (PM2.5) that was established by EPA in 1997.

In January, EPA issued a proposal to lower the daily standard for PM2.5. At the same time, EPA proposed to not change the annual PM2.5 standard. I understand that you will make a final decision by September as to whether the standards will be changed. I support the proposal to not change the annual standard. However, I do not support the proposal to change the daily standard and urge you to not change it either.

As a local official, I support programs to ensure that air quality meets EPA standards. At the same time, I am concerned that states and local governments have not had a chance yet to take steps to comply with the PM2.5 standard that was adopted by EPA in 1997. Changing the standard before we have taken steps to meet the existing standard does not make sense. Rather than changing the standard, I encourage EPA to work closely with state and local governments to ensure that all areas come into compliance with the existing PM2.5 standard. This cooperation is the best way to ensure that air quality continues to improve as quickly as possible.

Changing the PM2.5 standard now would not improve air quality any faster than programs to comply with the existing standard. However, changing the standard would add to the work load of state and local officials who are trying to comply with the existing standard and penalize areas before they have had a chance to comply with the existing PM2.5 standard.

Sincerely,

Robert H. Wright President

cc: Senator James Inhofe, Chairman, Senate Committee on Environment & Public Works Senator George Voinovich, Chairman, Senate Subcommittee on Clean Air, Climate Change and Nuclear Safety Liston D. Barfield District No. 58 - Horry County P.O. Box 1734 Conway, SC 29528

320-B Blatt Building Columbia, SC 29211

Tel. (803) 734-2968 Res. (843) 365-2049

Committee: Ways and Means

House of Representatives

June 27, 2006

State of South Carolina

Senator Lindsey O. Graham 290 Russell Senate Office Building

Washington, DC 29510

Dear Senator Graham:

I am writing to express my concern about the Environmental Protection Administration's proposed reductions in the 1997 National Ambient Air Quality Standard (NAAQS) particulate matter (PM2.5) standard. The Administrator has indicated that the finalized rule will be released in September 2006. Several local governments in my state that have achieved compliance with the 1997 standard will fall out of compliance if the standard is reduced.

Since the 1997 standard imposed under the Clean Air Act, there have been several new rulemakings that are just beginning to take effect with the full benefits to be realized by 2020. The EPA has indicated that national concentrations of PM2.5 have decreased by 10 percent since 1999. The new rules; Tier 2 Mobile Source Rule, Highway Diesel Rule, Off Road Diesel Rule, Clean Air Interstate Rule, Clean Air Visibility Rule, and the Clean Air Mercury Rule are all designed to significantly reduce Nox and SO2 emissions from mobile and stationary sources. The EPA has projected that PM2.5 will also be significantly reduced over the next two decades as a result of these new rulemakings.

My State has made substantial investments over the past 20 years to improve air quality and will continue to do so, but the additional cost to attain a lower standard prior to evaluating the impact of the new regulations puts our local economy at risk in terms of jobs, revenue, and economic growth. The EPA projects that even with these recently promulgated federal measures, a number of already well-controlled metropolitan areas will not attain the existing PM25 and/or 8-hour ozone NAAQS within the 2010-2015 timeframe prescribed by EPA, and could face highway sanctions or draconian control measures.

More importantly, the existing 1997 standard was deemed protective of human health and the environment and EPA's current estimate of health effects from exposure to PM2.5 has decreased since 1997. Since 1997, the scientific uncertainties regarding PM health effects have increased, calling into question the impact of socioeconomic factors on public health in urban areas. As an elected official, I want to explore these implications as I work to allocate resources to the areas where it will be of most benefit to the citizens of my state.

I urge you to streamline the regulatory requirements under the Clean Air Act by allowing the most recently enacted air quality rules authorized by the U. S. Congress to take effect prior to any new reductions in the NAAQS PM standard. Furthermore, I am writing to request you to require the EPA to provide states and/or local governments in conjunction with the air quality rules listed above prior to the reduction of the 1997 PM standard. Finally, I wanto notify you of my support to maintain current NAQS for PM2.5 until the full benefits of the recomblemacted air quality rules are in effect.

Sincerely,

REP. LISTON D. BARFIELD House Seat 058 - Horry County

LDB/sjk

David M. Ratcliffe Chairman, President and Chief Executive Officer Bin SC1500 30 Ivan Allen, Jr. Boulevard NW Atlanta, Georgia 30308

Tel 404.506.0855 Fax 404.506.0856



June 28, 2006

The Honorable Stephen L. Johnson Administrator U.S. Environmental Protection Agency Ariel Rios Building 1200 Pennsylvania Avenue, NW Mail Code: 1101A Washington, DC 20460

Subject: National Ambient Air Quality Standards for Particulate Matter

(Docket ID No. EPA-HQ-OAR-2001-0017)

Dear Administrator Johnson:

On behalf of Southern Company, I am writing to express my concern regarding EPA's proposed revisions to the ambient air quality standards for fine particulate matter (PM2.5). As you know, EPA first established the PM2.5 standard in 1997, but it has not yet been implemented. States should be given time to implement the current standard before the rules are changed. Beyond this, there are many uncertainties in the health effects information about PM2.5. These uncertainties make revision of the standard unjustified. We, therefore, encourage you to give EPA and the states time to fully implement the existing standard – and to resolve the many remaining scientific uncertainties – before changing either the 24-hour or the annual PM2.5 standard.

Southern Company is an integrated electric utility serving over four million customers in the Southeastern United States. We have spent over \$2 billion to implement Clean Air Act programs to date, and are planning to spend over \$6 billion more over the next decade for implementation of the Clean Air Interstate Rule, the Clean Air Mercury Rule, the Clean Air Visibility Rule, as well as the current PM2.5 and ozone standards. So far, our efforts have resulted in a decrease in sulfur dioxide and nitrogen oxides emissions of about 40%; by 2015, our emissions will be about 80% below 1990 levels.

In the midst of all these emissions reductions, EPA has proposed to make a critical ambient standard—the PM2.5 standard—significantly more stringent. However, EPA's proposal notice identifies numerous major uncertainties in the scientific information used to justify the proposed decision and, in fact, the National Academy of Sciences, the Office of Management and Budget, and EPA's Office of Inspector General have asked EPA to develop information regarding what types of air

The Honorable Stephen L. Johnson U.S. Environmental Protection Agency

June 28, 2006 Page Two

pollutants actually are responsible for specific health problems. While these difficulties render uncertain any benefit to be gained from tightening the current standard, the enormous economic consequences of much tighter standards are indisputable.

The EPA proposal will lead to the designation of many new non-attainment areas, with numerous ones projected in the states in which we operate. These designations will have severe consequences for the economy of our region as costs (for both pollution controls and for energy) rise for existing industries, possibly leading to relocations and attendant job losses. In addition, non-attainment designations are a strong deterrent to the location of new industries in any area, as well as the expansion of existing ones, leading to further impacts on jobs in our communities.

The proposal would also be extremely expensive. The consulting firm Environomics found that the new standard could – if EPA's draft Regulatory Impact Analysis is scaled up to cover the entire country – cost as much as \$20-60 billion per year. This is on top of the \$13 - \$20 billion annual cost for the current PM2.5 standard. These estimates would make EPA's proposal the most expensive federal regulation since OMB began tracking regulatory costs in 1981.

Southern Company supports changes to ambient standards when they are scientifically justified and cost effective. This proposed change meets neither of these criteria. We ask, therefore, that EPA (1) maintain the annual standard at 15 ug/m³ and the 24-hour standard at 65 ug/m³; (2) continue implementing the 1997 standards and 3) develop the information requested by the National Academy and others regarding what pollutants are responsible for health effects. This approach would allow an informed decision to be made over the next few years as to whether and how best to revise the particulate matter standards.

Southern Company appreciates this opportunity to describe its views on EPA's proposed particulate matter standards and would welcome further discussion with you on this issue. If you have any questions, please contact Chris M. Hobson, Senior Vice President of Research and Environmental Affairs at 205-257-2812.

Sincerely,

David M. Ratcliffe

cc: Senator James Inhofe, Chairman, Senate Committee on Environment and Public Works Senator George Voinovich, Chairman, Senate Subcommittee on Clean Air, Climate Change, and Nuclear Safety



OFFICE OF COUNTY MAYOR MIKE RAGSDALE

400 Main Street, Suite 615, Knoxville, TN 37902

The Honorable George V. Voinovich, Chairman Senate Committee on Environment & Public Works Subcommittee on Clean Air, Climate Change & Nuclear Safety 410 Dirksen Senate Office Building Washington, D.C. 20510

Dear Chairman Voinovich:

Thank you for the opportunity to provide written testimony to the Subcommittee on Clean Air, Climate Change and Nuclear Safety for the July 13, 2006 hearing.

I appreciate your committee taking the time to gather comments and study the impacts concerning the EPA's proposal to lower the National Ambient Air quality Standard to 14 ug/m³. EPA's decision to move in this direction will severely disrupt continued air quality progress in East Tennessee.

Sincerely,

Mayor Mike Ragsdale

Knox County, Tennessee
MRR:lu

MRR:lu Enclosure cc (Enclosure):

The Honorable Thomas R. Carper, Ranking Member Senate Committee on Environment & Public Works Subcommittee on Clean Air, Climate Change & Nuclear Safety 456 Dirksen Senate Office Building Washington, D.C. 20510

The Honorable James M. Inhofe, Chairman Senate Committee on Environment & Public Works 410 Dirksen Senate Office Building Washington, D.C. 20510

The Honorable James M. Jeffords, Ranking Member Senate Committee on Environment & Public Works 456 Dirksen Senate Office Building Washington, D.C. 20510

WRITTEN TESTIMONY OF MAYOR MIKE RAGSDALE Mayor of Knox County, Tennessee Senate Subcommittee on Clean air, Climate Change, and Nuclear Safety Thursday, July 13, 2006

Thank you, Chairman Voinovich, and members of the committee for the opportunity to provide written testimony before the Senate Subcommittee on Clean Air, Climate Change, and Nuclear Safety, concerning EPA's final decision on the setting of fine particulate matter (PM_{2.5}) National Ambient Air Quality Standard. I urge the committee to request that EPA retain the current 15 ug/m³ annual standard.

We in East Tennessee are proud of the progress that has been made in regional air quality, and we are confident that air quality will continue to improve significantly due to huge pollution cuts already in the pipeline.

In 2003, I, along with ten surrounding county mayors organized the Regional Clean Air Coalition, which is comprised of representatives from government, business and industry, educational institutions and the general public throughout East Tennessee. This Coalition is focused on creating, promoting, and implementing strategies to improve regional air quality. Together we have taken a variety of steps to reduce emissions in our region such as lowering speed limits for trucks and automobiles, banning the use of air curtain destructors, and implementing anti-idling policies. These activities are beginning to bear fruit. In addition, the Tennessee Valley Authority has installed, and is installing, over \$1.4 billion of emission controls on its three plants located in East Tennessee that will help to continue to significantly reduce fine particle concentrations.

As a local official, I strongly support programs to ensure that air quality meets EPA standards. At the same time, I am concerned that states and local governments have not had a chance to fully implement and assess the success of steps we are taking and will take to comply with the $PM_{2.5}$ designations just set last April.

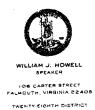
While the benefits of EPA's proposal are uncertain, the consequences of being classified as "non-attainment" for a National Ambient Air Quality Standard are far-reaching and severe. A non-attainment designation discourages new industry from locating within such areas and may prevent existing industries from expanding, both of which have negative impacts on jobs and local economies. The prospect of lost jobs and wages, as well as increased costs for energy and consumer products, appear to be far more certain than are any other benefits to be derived from EPA's proposed standards. EPA and other government agencies and committees admit that we do not know enough to target controls on the right emission sources or types of particles, indicating that there is a high degree of scientific uncertainty relating to the EPA proposal. In contrast, the enormous economic consequences of much tighter standards are indisputable.

EPA has yet to even define the planning process to attain the existing standard. Therefore, I encourage EPA to work closely with state and local governments to ensure that all non-attainment areas come into compliance with the existing $PM_{2.5}$ standard.

States and communities are now instituting controls and trying to plan for attaining the current 15 ug/m³ standard. Changing the standards now will present a new layer of needless complexity to the task local and state officials have in developing these plans to attain and maintain air quality standards in our region while maintaining public support of these actions.

Thank you,

Mayor Mike Ragsdale Knox County, Tennessee



COMMONWEALTH OF VIRGINIA
HOUSE OF DELEGATES
RICHMOND

COMMITTEE ASSIGNMENT

June 28, 2006

The Honorable John Warner United States Senate 225 Russell Senate Office Bidg. Washington, DC 20510

Dear Senator Warner:

I am writing to express my concern about the Environmental Protection Administration's proposed reductions in the 1997 National Ambient Air Quality Standard (NAAQS) particulate matter (PM2.5) standard. The Administrator has indicated that the finalized rule will be released in September 2006. Several local governments in my state that have achieved compliance with the 1997 standard will fall out of compliance if the standard is reduced.

Since the 1997 standard imposed under the Clean Air Act, there have been several new rulemakings that are just beginning to take effect with the full benefits to be realized by 2020. The EPA has indicated that national concentrations of PM 2.5 have decreased by 10 percent since 1999. The new rules; Tier 2 Mobile Source Rule, Highway Diesel Rule, Off Road Diesel Rule, Clean Air Interstate Rule, Clean Air Visibility Rule, and the Clean Air Mercury Rule are all designed to significantly reduce NOx and SO2 emissions from mobile and stationary sources. The EPA has projected that PM2.5 will also be significantly reduced over the next two decades as a result of these new rulemakings.

My state has made substantial investments over the past 20 years to improve air quality and will continue to do so, but the additional cost to attain a lower standard prior to evaluating the impact of the new regulations puts our local economy at risk in terms of jobs, revenue, and economic growth. The EPA projects that even with these recently promulgated federal measures, a number of already well-controlled metropolitan areas will not attain the existing $PM_{2.5}$ and/ or 8-hour ozone NAAQS within the 2010-2015 timeframe prescribed by EPA, and could face highway sanctions or draconian control measures.

More importantly, the existing 1997 standard was deemed protective of human health and the environment and EPA's current estimate of health effects from exposure to PM2.5 has decreased since 1997. Since 1997 the scientific uncertainties regarding PM health effects have increased, calling into question the impact of socioeconomic factors

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omenery,

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May 11, 2006

By Electronic Filing and First Class Mail

Hon. Stephen L. Johnson Administrator U.S. Environmental Protection Agency Mail Code 1101A 1200 Pennsylvania Avenue, N.W. Washington, D.C. 20460

Council of Industrial Boiler Owners

Air and Radiation Docket and Information Center U.S. Environmental Protection Agency Mail Code 6102T 1200 Pennsylvania Avenue, N.W. Washington, D.C. 20460 Attn: Docket ID No. EPA-HQ-OAR-2001-0017

Re: Comments on Behalf of Industry Trade Associations on EPA's Interim Regulatory Impact Analysis (RIA) Supporting the Proposed "National Ambient Air Quality Standards for Particulate Matter," 71 Federal Register 2620 (Jan. 17, 2006), OAR-2001-0017

These comments on EPA's interim RIA supporting the proposed "National Ambient Air Quality Standards for Particulate Matter," 71 Federal Register 2620 (Jan. 17, 2006) are submitted on behalf of the following trade associations:

Alliance of Automobile Manufacturers American Chemistry Council

American Coke and Coal Chemicals American Forest & Paper Association

Institute

American Iron and Steel Institute American Petroleum Institute

Engine Manufacturers Association National Association of Manufacturers

Edison Electric Institute

National Cotton Council National Mining Association

222

National Oilseed Processors Association

National Petrochemical & Refiners

Association

National Rural Electric Cooperative

Portland Cement Alliance

Association

U.S. Chamber of Commerce

Utility Air Regulatory Group

Collectively, these associations represent a large portion of the U.S. economy.

Many of these associations have submitted separate comments on various aspects of the proposed revisions to the PM NAAQS, and other individuals and organizations have provided additional comments on behalf of these associations. This set of comments developed on behalf of these associations does not address the proposed regulation directly, but instead addresses EPA's interim Regulatory Impact Analysis (issued in January 2006) in support of the proposed regulation.

EXECUTIVE SUMMARY

EPA has prepared an interim Regulatory Impact Analysis (RIA) for the proposed PM_{2.5} standards. EPA's interim RIA provides an estimate of how much of the nation would be in nonattainment under several alternative NAAQS, and provides detailed estimates of the costs and benefits of these alternative standards for five particular urban areas. EPA recognizes the value of the RIA, and plans to develop an improved, nationwide analysis this summer to support decisions on the final rule. Although there are important changes that we would like to see made as EPA revises and expands the current version of the RIA, we nevertheless believe that the interim RIA provides some useful insights about alternative PM_{2.5} NAAQS. In these comments, we discuss the key conclusions that we derive from the interim RIA and provide suggestions about improvements in the analysis that EPA should implement in the final RIA.

I. Conclusions from the Interim RIA

The interim RIA provides the basis for several conclusions that we believe are quite important in judging whether to revise the existing PM_{2.5} NAAQS:

A. The interim RIA shows sharply diminishing returns from tightening the fine particle standard.

Most recent air pollution regulations addressing largely criteria pollutants have shown monetized benefits far exceeding costs. The interim RIA projects that implementation of the current PM_{2.5} NAAQS will have benefits only roughly equal to costs, while the proposed tighter fine particle standard will have benefits well short of costs. Alternative fine particle standards even more stringent than EPA's 15/35 proposal would have costs that even further exceed benefits. The nation would get an insufficient return on investment and far less bang for the buck from the ever-tightening fine particle standards that are being considered.

B. The interim RIA indicates how onerous controls would need to be in order to attain the proposed NAAQS or more stringent alternatives.

Across the five urban areas that EPA studied, attainment of the proposed 15/35 standard via urban-area controls is projected to cost an incremental \$9 billion - \$19 billion per year beyond: 1) the as-yet-unspent "baseline" costs of meeting the large number of recently adopted national/regional air pollution control regulatory requirements; and 2) an additional \$6 billion per year in estimated costs to attain the current fine particle standard. Attainment of either of the more stringent alternatives would cost far more: the interim RIA projects additional costs of as much as \$50 billion per year (beyond the "baseline" costs and the costs to achieve the current standard) to achieve only partial attainment of the 15/30 alternative in each of the five urban areas via urban-area controls.

Scaling up to the entire nation the costs that EPA estimates for the five urban areas, we estimate that nationwide compliance with the proposed 15/35 standard via urban-area controls would cost approximately \$20 billion - \$60 billion per year, on top of the "baseline" costs and roughly \$13 billion - \$20 billion per year in costs for nationwide attainment of the current standard. This would make EPA's proposed revision of the PM_{2.5} NAAQS the most expensive Federal regulation since the Office of Management and Budget began to compile records of regulatory costs in 1981.

C. The interim RIA projects significant progress in reducing fine particle nonattainment from implementation of the many recently adopted Federal/regional air pollution control requirements.

EPA projects that the large set of recently adopted programs will reduce the number of counties with monitors not attaining the current $PM_{2.5}$ NAAQS by nearly 75%, from 116 currently to 32 in 2015. Implementation of these existing requirements will necessitate a very large administrative effort from Federal, state and local governments, as well as tens of billions of dollars in compliance costs to sources. Tightening the fine particle standard now would likely distract states, localities and sources from successfully implementing these important requirements. Why tighten the $PM_{2.5}$ NAAQS now – in the face of great scientific uncertainty about the health impacts of fine particles and despite EPA's finding that the benefits of doing so would be far short of the costs – and likely jeopardize the ongoing massive effort to implement existing air pollution control requirements?

II. Suggested Improvements for the Final RIA

We suggest several improvements for the final RIA that we believe would provide a more accurate picture of the costs and benefits of alternative fine particle standards:

A. EPA should adopt a more realistic approach to simulating the control measures a nonattainment area will adopt.

EPA's approach in the interim RIA presumes that a non-attaining community will select control measures to comply with the NAAQS strictly in order of cost-effectiveness: the community will adopt the most cost-effective controls first, and then work its way down the list of available, less cost-effective controls until the locality just achieves the standard. This sort of

optimized, least-cost approach to selecting the control measures needed for attainment is highly unrealistic. Localities do not select measures based solely or primarily on cost-effectiveness; they often choose to require cost-ineffective control measures for industrial sources ahead of more cost-effective controls for households and transportation that are viewed as more intrusive and less politically acceptable. EPA should adopt a simulation procedure that more closely replicates the sorts of control strategy decisions that communities typically make.

B. EPA should not assume use of "innovative and emerging" control measures to achieve any substantial fraction of the emission reductions needed for attainment.

It is unrealistic to assume that a locality will be able to rely extensively on as-yet-unknown and unidentified "innovative and emerging" controls to attain standards. Innovations in particulate control technology will likely occur at a limited pace in the future, and the cost-per-ton-controlled for any innovative control measures will probably be higher than that for the great bulk of currently known controls. Rather that assuming extensive availability of cheap new controls, EPA should endeavor for the final RIA to expand the list of known, documented, and validated controls that are available as options in the simulation.

C. EPA should address both the counties with non-attaining monitors and the counties in nonattainment areas.

In the Agency's recent final designation of PM_{2.5} nonattainment areas, EPA designated both the counties with non-attaining monitors and any surrounding areas thought to contribute to the exceedances of the NAAQS. The number of counties designated as being in nonattainment is about twice the number of counties with nonattaining monitors. In essence, the area across which local nonattainment-related controls (emission reductions plus nonattainment NSR and transportation conformity) will be required is about twice as large as the area within which the NAAQS will be exceeded. EPA does not reflect in the interim RIA this larger scope for nonattainment program impact and thus, in our view, provides misleading conclusions.

D. EPA should reflect in the RIA the costs of NSR and transportation conformity.

The cost to a community of being in nonattainment with a NAAQS includes not only the cost of the controls that must be implemented to attain the standard, but also the economic losses from being subject to nonattainment new source review (NSR) and transportation conformity requirements while in nonattainment. These additional sorts of losses were documented in EPA's New Source Review: Report to the President, and should be included in EPA's benefit-cost analysis for the rule.

E. EPA's sensitivity analysis for different possible mortality thresholds is inadequate for several reasons.

We question the particular functional form that EPA has assumed for a threshold-based, concentration-response function in this analysis, and question EPA's simple procedure for upwardly adjusting the slope of this function to reflect a threshold. We refer EPA to the detailed comments on this subject by Dr. Paul Switzer (Attachment B in Docket # EPA-HQ-OAR-2001-0017-1554.1). In addition, EPA's regional-scale modeling for the interim RIA has insufficient geographic resolution to permit a reliable sensitivity analysis for different possible mortality thresholds. In EPA's modeling, a single PM_{2.5} concentration is simulated as applying to the entire population residing within a 36x36 kilometer grid square, an area roughly equal in size to

a typical county. This approach fails to portray the substantial local variation in concentrations that actually exists. EPA thus cannot accurately gauge the fraction of a city's population that is exposed at a level above or below any possible threshold for $PM_{2,5}$ mortality benefits.

Our full detailed comments on EPA's interim RIA are attached to this cover letter.

Respectfully submitted,

/s/

Stuart L. Sessions Vice President, Environomics, Inc.

Attachment

COMMENTS ON EPA'S INTERIM RIA

EPA has prepared an interim Regulatory Impact Analysis (RIA) for the proposed PM_{2.5} standards. EPA's RIA provides an estimate of how much of the nation would be in nonattainment under several alternative NAAQS, and provides detailed estimates of the costs and benefits of these alternative standards for five particular urban areas. EPA recognizes the value of the RIA, and plans to develop an improved, nationwide analysis this summer to support decisions on the final rule. Although there are important changes that we would like to see made as EPA revises and expands the current version of the RIA, we nevertheless believe that the interim RIA provides some useful insights about alternative PM_{2.5} NAAQS. In these comments, we discuss the key conclusions that we derive from the interim RIA and provide suggestions about improvements in the analysis that EPA should implement in the final RIA.

I. Conclusions from the Interim RIA

The interim RIA provides the basis for several conclusions that we believe are quite important in judging whether to revise the existing PM_{2.5} NAAQS:

A. The Interim RIA Shows Sharply Diminishing Returns from Tightening the Fine Particle Standard.

RIAs for the major, recently-adopted air pollution control regulations targeting largely criteria pollutants have typically shown monetized benefits far exceeding costs, by at least 5:1 and in one case by nearly 60:1 (e.g., CAIR, CAVR, heavy duty truck standards, non-road vehicle standards, etc.). The interim RIA, however, shows in the five urban areas that were studied, that implementation of the existing fine particulate standard would result in a much lower ratio of benefits to costs than has prevailed for other recent regulations. As shown in the first row in Table 1, the interim RIA projects that implementation of the current standard will generate benefits ranging across the urban areas from roughly equal to costs to about 4-5 times costs.

The proposed tighter fine particulate standard shows a further reduction in the ratio of benefits to costs. EPA estimates that the additional controls that might be needed to attain the proposed 15/35 standard in the five urban areas (i.e., the additional controls needed to attain 15/35 relative to the set of controls needed only to meet the current standard) will yield incremental benefits well short of their costs. See the second row in Table 1.

Alternative fine particle standards even more stringent than EPA's 15/35 proposal show further diminishing returns. Table 2, which summarizes EPA's estimates in the interim RIA, shows that the incremental measures projected as needed to meet the 15/30 and 14/35 alternatives would have costs far exceeding their monetized benefits.

¹ The following are the estimated ratios of benefits to costs for these four rules: CAIR 20-32 to 1; CAVR 5-7 to 1; heavy duty engines/sulfur in diesel 17 to 1; non-road vehicles 13-58 to 1. Source: OMB Report to Congress on Costs and Benefits of Federal Regulations (2005) and EPA RIAs for these rules.

Table 1. Costs and Benefits* for the Incremental Measures Needed for Attainment Via Urban-Area Controls (Billion 1999\$/year, 7% Discount Rate)

7	Atla	Atlanta	Chic	Chicago	NY / Phis	NY / Philadelphia	Seattle	ttle	San Jo	San Joaquin	Total: 5 Urban Areas	ban Areas
Standard	Costs	Bens.	Costs	Bens.	Costs	Costs Bens. Costs Bens. Costs Bens. Costs Bens.	Costs		Costs	Bens.	Costs	Bens.
15/65 Current	2.1	2.2	2.1 - 2.4	6.8 - 7.5	Zero – V measures	2.1 2.2 2.1 - 2.4 6.8 - 7.5 Zero – Will attain with implementation of measures already req'd under existing regs.	th implement d under exis	tation of ting regs.		6.9 - 7.1	1.4-1.8 6.9-7.1 5.6-6.3 15.9-16.8	15.9 - 16.8
15/35 Proposed (costs and Zero – Annual std is controlling; no bens shown are those for the measures beyond those needed to attain tatan 15/35 and 25/35 for the period of	Zero - measures current s	- Annual std is beyond those natandard will be	Zero – Annual std is controlling; no heasures beyond those needed to attain the current standard will be needed to attain 15/35.	ig; no attain the to attain	4.3	2.5	0.8	0.5	0.5 3.7 - 13.6**	2.6**	8.8 - 18.7	5.6

Source: Estimates in Appendix A, Interim RIA
* Assuming PM mortality benefits all the way down to 7.5 ug/m³
** Figures for San Joaquin are for only partial attainment of 15/35 proposed standard. Full attainment not possible with urban-area controls only.

Table 2. Costs and Benefits** for the Incremental Measures Needed to Attain More Stringent Alternatives, Using Urban-Area Controls Only (Increments Relative to Current NAAQS) (Billion 1999\$/year, 7% Discount Rate)

ć	Atla	Atlanta	Chicago	90	NY / Phifadelphia	lelphia	Seattle	8	San Joaquin	quin	Total: 5 Urban Areas	an Areas
Standard	Costs	Bens.	Costs Bens. Costs Bens. Costs	Bens.	Costs	Bens.	Costs	Bens.	Bens. Costs	Bens.	Costs	Bens.
15/35 Proposed	Annual std. those meas	is controlling sures needed	Annual std. is controlling; can attain with only those measures needed to attain current std.	with only ent std.	4.3	2.5	8.0	0.5	0.5 3.7 - 13.6* 2.6* 8.8 - 18.7	2.6*	8.8 - 18.7	5.6
15/30	0.8 - 6.0*	2.4*	0.2 - 1.0*	0.3*	8.0 - 28.3*	9.8*	0.8-60" 2.4" 0.2-1.0" 0.3" 8.0-28.3" 9.8" 0.8-1.2" 0.7" 3.7-13.6" 2.6" 13.5-50.1	0.7*	3.7 - 13.6*	2.6*	13.5 - 50.1	15.8
14/35	0.8 - 3.5	6:0	0.2 - 1.0*	0.3*	0.8-3.5 0.9 0.2-1.0* 0.3* 4.3 2.5	2.5		0.5	3.7 - 13.6*	2.6*	0.8 0.5 3.7-13.6* 2.6* 9.8-23.2	6.8

Source: Estimates in Appendix A, Interim RIA

Note: Each of these rows shows costs and benefits for those measures needed to attain the alternative standard, above and beyond those measures needed to attain the current 15/65 standard. The total costs and benefits of attaining any of these alternatives are the incremental costs and benefits as shown here, plus the costs and benefits of the measures needed for attaining the current standard as shown in the first row of Table 1.

Where a range is shown for costs, the low end of the range assumes "innovative/emerging" controls are available at a cost equal to the 50th percentile cost for existing, known controls. The high end of a range assumes "innovative/emerging" controls are available at a cost equal to the 90th percentile cost for existing, known controls.

^{*} For partial attainment only; cannot attain fully using urban-area controls only ** Assuming PM mortality benefits all the way down to 7.5 ug/m 3

Note that the cost and benefit estimates developed in EPA's interim RIA do not, in our view, reflect the substantial uncertainty about whether there are any mortality benefits at all in reducing fine particulate concentrations below the level of the current standard. EPA's estimates also include some assumptions that we believe cause costs to be underestimated, which we will discuss later in this section.

In sum, EPA's interim RIA shows that tightening the fine particle standard would not be beneficial for the American public. A more-balanced analysis that accurately estimates costs and portrays the full range of uncertainty in benefits would provide an even clearer picture. The nation is getting an insufficient return on investment and far less bang for the buck from the ever-tightening fine particulate standards that are being considered.

B. The Interim RIA Provides Some Indication of How Onerous Controls Would Need to Be in Order to Attain More Stringent NAAOS.

Using information in Appendix A of the interim RIA, we have generated the table below to summarize the sorts of controls that EPA estimates will be needed to meet alternative $PM_{2.5}$ NAAQS in five currently non-attaining cities.

Table 3. Nature of Controls Needed for Attainment by 2015 in Five Urban Areas

NAAQS Alternative	Atlanta	Chicago	New York / Philadelphia	Seattle	San Joaquin
15/65 Current	Add local, urban	-area controls	Implementation o programs (e.g., C		Add local, urban-area controls
What further contr current standard?	ols must be adde	d to attain more s	tringent NAAQS, n	elative to the con	trols needed to attain the
15/35 Proposed	Nothing beyond to meet 15/65	what is needed	Add local, urban-	area controls	Not possible by 2015, Maybe by 2020 with regional controls plus tech- forcing local controls
15/30 More stringent	Add regional cor urban-area conti	ntrols plus much i rols	more stringent	Cannot attain by 2015, even with urban- area + regional controls	Not possible even by 2020 with maximum local controls plus regional controls
14/35 More stringent	Add more local controls to those needed for 15/35	Add regional controls + more urban- area controls	Add more local controls to those needed for 15/35	Local controls needed for 15/35 will suffice	Not possible by 2015. Maybe by 2020 with regional controls plus tech- forcing local controls

The interim RIA projects that the controls needed for attainment get much more onerous as one moves from the current NAAQS to EPA's proposed standard, to even tighter alternatives. For the 15/30 alternative in particular, attainment is not possible in two of the five urban areas even with the maximum combination of urban-area plus regional controls that EPA simulated. For the remaining three urban areas, attaining 15/30 would require a combination of moderate further regional controls (in addition to the comprehensive set of recently adopted but not-yetimplemented regional/national control programs) plus very stringent urban-area controls.

The interim RIA provides limited further information about the source types that would need to be controlled in each urban area to meet these alternative standards, and about the percentage emissions reductions that may be needed from each source type. For example:

- In Atlanta, compliance with the existing fine particle standard is projected to require a sharp 80% reduction in SOx emissions beyond those already required under CAIR from all power plants in the metropolitan area, plus moderate (11 31%) reductions in point, area and mobile source carbon emissions. Compliance with one of the tighter standards under consideration (15/30) is predicted to require these power plant controls plus an 80% reduction in all urban-area point source, mobile source and area source emissions of carbonaceous particles, plus an 80% reduction in all VOC emissions. EPA notes that this package of urban-area controls would include many that are highly costineffective, and even then the 15/30 standard would likely not be attained without further regional controls also.
- In the New York/Philadelphia area, implementation of the set of recently adopted national regulatory requirements is expected to result in attainment of the current PM_{2.5} NAAQS by 2015. Attainment of the tighter standard that EPA has proposed (15/35) is projected to require a further package of mostly carbonaceous particle controls (mostly on area sources, including such measures as retrofit of non-road diesel engines, street vacuuming, controls on burning, etc.) costing an additional estimated \$4.3 billion/year. Attainment of the 15/30 alternative, however, is not possible even with all available urban-area controls. The interim RIA concludes that attaining 15/30 would require a multi-state 20% reduction in all regional emissions, plus a very stringent package of controls on most point, area, and electric utility sources of carbon and SOx within these two urban areas. EPA has not estimated the cost to New York/Philadelphia of attaining 15/30 via this combined urban-area/regional approach, but we expect this combined approach might cost an amount roughly similar to the \$8 billion \$28.3 billion per year figure estimated for maximum application of urban-area controls alone.²
- In the San Joaquin Valley, the interim RIA concludes that attainment of the current standards with local controls alone would require steep reductions in almost every emissions category. No combination of local controls would be sufficient to attain EPA's proposed standard, much less either of the more stringent alternatives under consideration. Even with an extremely costly package of moderate regional reductions and maximum possible local controls, EPA's proposed standard would still likely not be attainable by the projected 2015 deadline, but attainment might be possible by 2020. The 15/30 alternative does not seem to be attainable under any circumstances even by 2020, even assuming such extreme measures as 80% control on all mobile source NOx.

These examples give some flavor of the control measures and costs that EPA projects

² EPA estimates that the maximum package of urban-area controls would cost \$8 billion - \$28.3 billion per year, and that this package would not be sufficient to attain 15/30 for New York/Philadelphia. Attaining 15/30 would require additional emission reductions beyond those available within these urban areas alone, suggesting that any package of controls that actually attains this alternative NAAQS would likely have costs higher than this range. On the other hand, a package that includes some regional control measures as well as urban-area controls would likely be more cost-effective than the urban-area-only package (i.e., cost-effective regional controls could substitute for some cost-ineffective urban-area controls), suggesting some cost savings by switching from an urban-only to an urban-plus-regional approach.

will be needed to attain the current PM2.5 NAAQS and more stringent alternatives. As shown previously in Tables 1 and 2, across the five urban areas that EPA has studied, attainment of the proposed 15/35 standard via urban-area controls is projected to cost an incremental \$9 billion - \$19 billion per year beyond: 1) the as-yet-unspent "baseline" costs of meeting the large number of recently adopted national/regional air pollution control regulatory requirements (e.g., CAIR, CAVR, CAMR, non-road vehicle standards, etc.); and 2) an additional \$6 billion per year in estimated costs to attain the current fine particle standard. Attainment of either of the more stringent alternatives would cost far more: the interim RIA projects additional costs of as much as \$50 billion per year (beyond the "baseline" costs and the costs to achieve the current standard) to achieve only partial attainment of the 15/30 alternative in each of the five urban areas via urban-area controls.

In the absence of any cost estimate yet from EPA for the entire nation, as opposed to the five urban areas, we have developed a very rough estimate by extrapolating the costs for these five urban area to the remainder of the nation's current PM_{2.5} nonattainment areas. The five urban areas studied by EPA account for a little less than 1/3 of all the recently designated PM_{2.5} nonattainment counties, and for about 43% of the total population in these counties. If we scale EPA's costs estimated for the five areas up by a factor ranging from 2.32 to 3.18 based on these relationships, we then estimate that nationwide compliance with the proposed 15/35 standard via urban-area controls would cost roughly \$20 billion - \$60 billion per year, on top of the "baseline" costs and roughly \$13 billion - \$20 billion per year in costs for nationwide attainment of the current standard. This would make EPA's proposed revision of the PM_{2.5} NAAQS the most expensive Federal regulation since the Office of Management and Budget began to compile records of regulatory costs in 1981. The only Federal regulation promulgated since 1981 that begins to approach the cost of the proposed PM_{2.5} NAAQS is the 1997 revision to the PM NAAQS.

The five urban areas that EPA studied in the interim RIA include 71 full or partial counties among the 226 that EPA designated as nonattainment for PM_{2.5}, a little less than 1/3 of the national total. This suggests using a factor of 3.18 to scale up from the urban areas studied by EPA in the interim RIA to the entire set of designated nonattainment counties (226/71 = 3.18). Source: EPA, "Comparison of State Recommendations on PM_{2.5} to EPA Responses". www.epa.gov/pmdesignations/documents/final/finaltable. The 71 nonattainment counties included in the five urban areas analyzed in the interim RIA have a population of 43,715,204, while the full set of 226 designated nonattainment counties has a total population of 101,363,203. This population-based approach suggests an alternative scaling factor of 2.32 (101,363,203/43,715,204 = 2.32).

⁴ Source: information in U.S. Office of Management and Budget, 2005 Report to Congress on the Costs and Benefits of Federal Regulations. In this report, OMB presents data on the total cost of all the major Federal regulations issued during a year, for each year from 1981 through 2004. In no year between 1981 and 2004 has the total cost of all the major Federal regulations issued during the year reached the \$20 billion/year lower bound figure that we estimate (by scaling EPA's estimate for the five urban areas) as the incremental cost of the PM2.5 proposal. Further detail on the costs of individual regulations can be obtained by reviewing multiple OMB reports to Congress and (for rules issued since FY 2004) OMB's reginfo.gov web site. These sources indicate that no Federal regulation since records were first kept in 1981 has imposed costs as high as the estimated range of \$20 billion - \$60 billion/year for the current PM2.5 proposal.

There are varying estimates for the cost of the 1997 PM NAAQS revisions. OMB most recently estimated a combined cost of \$10 billion - \$22 billion per year for compliance with the 1997 revisions to both the PM and ozone NAAQS (OMB, 2005 Report, op cit., p. 36). Previously, OMB had estimated, using a somewhat different methodology, an annualized cost of \$17 billion/year for compliance with the 1997 PM revisions alone (OMB, 2000 Report to Congress on the Costs and Benefits of Federal Regulations, Table 13). EPA's RIA for the 1997 rule provided several estimates for the cost of the 1997 PM NAAQS revisions, using somewhat different methodologies and presuming different degrees of attainment. The partial attainment scenario that was analyzed in the 1997 RIA is perhaps most similar to how the analysis in the 2006 interim RIA has been conducted. The 1997 RIA estimated a cost of \$8.6 billion/year (1990 dollars) in 2010 for partial compliance with the revised PM NAAQS. Converting this

We believe that communities potentially affected by revised PM_{2.5} standards would appreciate having more information than EPA has yet provided about the specific control measures that EPA anticipates might be needed in order to attain the various alternative standards. In the studies of the five urban areas, EPA has thus far provided only information about the percentage reduction needed in each of 12 "control factors" in each urban area.⁶ In the interim RIA and technical support documents, EPA has not gone further to indicate exactly which control measures applied to which sources the Agency has simulated as sufficient to attain the alternative standards.

To enable a community to judge fairly what a revised NAAQS would mean to the community, EPA should make available the Agency's projections about the specific control measures the community might need to implement for compliance. Would the community need to implement an automobile inspection and maintenance program? Would the community need to regulate residential wood stoves and fireplaces, or adopt NOx limits for home furnaces? Would the community need to upgrade its car pooling and mass transit programs, or reduce highway speed limits? Might the community need to opt into an oxygenated fuels program? It is answers to questions like these that would give a community a reasonable basis for assessing how difficult it would be to attain each of the alternative NAAQS. EPA has, in effect, already answered such questions in selecting particular AirControlNET measures to apply in the simulation for each urban area, but the Agency has not yet provided this information to the public. We suggest that EPA do so, in order to help communities understand better how easy or difficult it might be for them to attain any particular standard. We realize that any such identification of specific measures would be illustrative only, since states and communities ultimately determine for themselves which measures they will choose to implement. Nevertheless, we believe that listing the specific measures that EPA has simulated for each urban area would be useful.

Finally, we suggest for the final RIA when EPA develops national cost estimates, that the Agency develop scenarios and estimate costs and benefits both for full attainment and for partial attainment. For each NAAQS alternative, one or more control scenarios that will be sufficient to provide for full attainment should be developed and costed. Also, to the extent there are reasons

figure to 1999 dollars to match the way in which costs are expressed in the 2006 interim RIA, the 1997 RIA would have estimated costs for the 1997 PM NAAQS revisions at about \$11.0 billion/year in 1999 dollars (1999 U.S. city average CPI for all items was 166.6 while the 1990 figure was 130.7, for an inflation factor of 1.2747 to convert 1990 dollars to 1999 dollars). Each of these cost estimates for the 1997 NAAQS revision is clearly less than the \$20 billion - \$50 billion/year cost estimate for the proposed 2006 revision. Another cost estimate developed in the 1997 RIA for the 1997 NAAQS revision was \$37 billion in 1990 dollars, but this estimate was for full compliance with the NAAQS by a date sooner than when full compliance is required by the Clean Air Act. We do not believe this particular cost estimate was developed in a manner comparable to how the cost estimate for the proposed rule was developed in the 2006 interim RIA.

⁶ A "control factor" in the RIA's terminology is essentially a source type/pollutant type combination. Thus one "control factor" is SOx from area sources, while another is NOx from electricity generating units, and another is carbon from mobile sources. In the interim RIA, EPA indicates for each of the five urban areas how much reduction in each of the 12 control factors is estimated to be needed for attainment. Thus, for example, EPA projects that Chicago, in order to attain the existing 15/65 NAAQS via urban-area controls, would need to reduce emissions by 80% for each of seven control factors (SOx EGU, SOx Non-EGU Point, SOx Area, Ammonia Area, Ammonia Mobile, Point Source Carbon, and Area Source Carbon) and by 10 % for one control factor (Mobile Source Carbon), and would not need to reduce emissions at all for the other four control factors. We are suggesting that EPA should go farther than the Agency has done thus far, by identifying the specific control measures that EPA has simulated as the least-cost approach in each urban area for obtaining these reductions in control factor emissions.

why controls sufficient for full attainment are infeasible in one or another community, then additional scenarios providing only for partial attainment could also be analyzed. EPA's interim RIA does not meet this goal: a full attainment scenario is not analyzed for each NAAQS alternative for each urban area. For example, for the 15/35 proposed standard, the set of urbanarea controls that the interim RIA simulates and analyzes is sufficient for full attainment in four of the five urban areas, but it is not sufficient for full attainment in the San Joaquin Valley. For the 15/30 alternative, the set of urban-area controls that EPA analyzes is not sufficient to fully attain this alternative NAAQS in any of the five urban areas. The final RIA should evaluate, at a minimum, full nationwide attainment of each NAAQS alternative under consideration.

C. The Interim RIA Projects Significant Progress in Reducing Fine Particle
Nonattainment from Implementation of the Many Recently Adopted Federal/Regional
Programs.

EPA has recently established and the nation has begun to implement a wide range of important new air pollution control programs affecting nearly every significant variety of source: CAIR, CAMR, CAVR, light and heavy duty truck rules, non-road mobile source standards, the NOx SIP call, fuels standards, major new NSPS regulations, Title IV NOx and SO₂ controls, etc. The interim RIA shows how much progress these programs now being implemented will yield with respect to fine particulate matter. By the year 2015, despite the projected increases in population, economic activity, vehicle miles traveled, etc., EPA estimates these programs will reduce the number of counties with monitors not attaining the current PM_{2.5} NAAQS by nearly 75%, from 116 currently to 32 in 2015.

Implementation of these existing requirements will involve a very large administrative effort from Federal, state and local governments, as well as tens of billions of dollars in compliance costs to sources. At the same time as this set of major new programs is being implemented, the nation has also recently begun implementation of the current PM_{2.5} standards, with SIPs due by April 2008 and attainment due by 2010.

We understand that several industry groups and others have provided comments to EPA questioning the advisability of tightening the fine particle standard at the same time as these other large and complex undertakings are getting underway. Previous RIAs have shown that these recently adopted regulatory requirements generally have benefits far exceeding their costs. The interim RIA shows further that these recent requirements will greatly reduce fine particle nonattainment. We are sympathetic to the comments of others to the effect that successfully completing implementation of these very important existing requirements should be the nation's first priority in air pollution control. Tightening the fine particle standard now would, according to the interim RIA, impose costs on the nation's economy that exceed benefits (note furthermore that we do not believe the interim RIA's benefit estimates adequately reflect the uncertainty about whether mortality benefits exist below the level of the current standard.) Tightening the fine particle standard now would also likely distract states, localities and sources from successfully implementing the many significant new air pollution control requirements.

II. Suggested Improvements for the Final RIA

We suggest several improvements for the final RIA that we believe would provide a more accurate picture of the costs and benefits of alternative fine particle standards. We support several improvements that EPA has already indicated the Agency will make, including:

- Extending the cost and benefit analysis to the entire nation rather than only the five urban areas;
- Improving the emissions inventory, particularly to include reconciling the seemingly low level of mobile source emissions included in the inventory with their apparent greater importance suggested by receptor modeling; and,
- Exploring methods for testing the implications of different potency for different components of PM_{2.5}.

In addition, EPA should make the following further changes:

A. Adopt a More Realistic Approach to Simulating the Control Measures a Nonattainment Area Will Adopt.

EPA's current approach relies on a least-cost module within the AirControlNET controls database. This module generates a list of control measures available to a locality for each "control factor" that is rank-ordered in terms of annualized cost-effectiveness for each pollutant. In essence, this module sequences in order of declining cost-effectiveness the control measures that a locality will adopt in seeking attainment. A nonattainment area that is projected as needing, say, a 50% reduction in SOx emissions from non-EGU point sources is simulated as adopting the most cost-effective, non-EGU point source SOx controls first, and then working its way down the list of available, less-cost-effective measures until the locality just achieves the 50% reduction target.

This sort of optimized, least-cost approach to selecting the control measures needed for attainment is highly unrealistic. Localities do not select measures based solely or primarily on cost-effectiveness, and the package of controls they ultimately implement will often be far more costly than the theoretical least-cost package. In our experience, localities often choose to require cost-ineffective control measures for industrial sources ahead of more cost-effective controls for households and transportation that are viewed as more intrusive and less politically acceptable. Localities weigh a wide range of criteria in establishing control strategies; cost-effectiveness is only one criterion. The package of controls that the community ultimately adopts will likely be much more costly than the least-cost strategy.

EPA should adopt a simulation procedure that more closely replicates the sorts of control strategy decisions that localities typically make. To inform this new procedure, we suggest conducting several case studies in which the package of controls that was selected by a non-attaining locality in practice is compared against the least-cost package as projected by AirControlNET. We suspect that criteria relating to political acceptability will be found to be much more important in explaining the set of control measures actually chosen than is cost-effectiveness.

B. EPA Should Not Assume Use of "Innovative and Emerging" Control Measures to Achieve Any Substantial Fraction of the Emission Reductions Needed for Attainment.

The methodology and results of the interim RIA are not presented in sufficient detail to make apparent the extent to which assumed "innovative and alternative" controls are estimated

to be used in attaining the various alternative standards in the five case-study urban areas. We suspect, though, that they are simulated as playing a substantial role in attaining standards, at least in instances where the projected 2015 "baseline" fine particulate concentration significantly exceeds the NAAQS alternative being analyzed. We base this suspicion on the substantial difference in costs estimated when "innovative and emerging" controls are assumed to cost a 50th percentile value, compared with when they are assumed to cost a higher, 90th percentile value. (See, for example, Table A-11 for Atlanta, showing that attainment of the 14/35 alternative via urban-only controls would cost 4 to 6 times more assuming that "innovative and emerging" controls cost the 90th percentile value, than attainment would cost assuming these controls are available at the 50th percentile cost value. This could be the case only if "innovative and emerging" controls are estimated to play a large role in attaining this standard.)

We believe that it is unrealistic to assume that a locality will be able to rely extensively on as-yet-unknown, "innovative and emerging" controls to attain standards. EPA has provided no data and little rationale to suggest the extent to which such controls might become available in time to help with attainment by 2015, and likewise virtually no data or rationale suggesting the costs at which such controls might become available. (See pages 3-12 through 3-15 of the interim RIA.) We are not persuaded by EPA's vague assertions that "broad social trends," "technological change" and "innovative approaches" will result in relatively inexpensive, new control measures becoming widely available and widely applied. In our view, there are several factors that point in the opposite direction – suggesting that innovations in particulate control technology will occur at a limited pace in the future, and that the cost-per-ton-controlled for any innovative control measures might likely be higher than that for the great bulk of currently known controls:

- Many sources of fine particulate matter emissions or their gaseous precursors are already reasonably well controlled (and will be further controlled under the broad set of "baseline" programs that EPA assumes will be implemented by 2010/2015). Further emission reductions will involve more complete control of these already well controlled sources, likely at higher costs-per-ton as one moves farther out the curve of increasing marginal control costs.
- Many controls for fine particulate matter and its gaseous precursors are longstanding, relatively mature technologies (e.g., scrubbers, baghouses, coal washing, etc.; see the sample list on page 3-11). There is little reason to suspect there will be significant and inexpensive innovations in these tried-and-true control technologies. Nor does it seem likely that there will be widely applicable, new control technologies that are substantially different from these.
- The sharp recent increases in electricity, natural gas and other energy prices make it likely that any future control measures that require energy or involve energy penalties will cost more, not less, than the control technologies currently available.

Note that we cannot find either of two particular documents that EPA references in the interim RIA as providing some justification for assuming widespread availability of "innovative and emerging" control technologies:

 On page 3-12, EPA says "For an exhaustive list of these innovative and emerging controls, readers can consult the technical support document for this analysis." We cannot identify this document. This may perhaps be a reference to either E. H. Pechan and Associates, Inc., "Methodology to estimate costs and related files for national, regional and local control strategies using AirControlNET in conjunction with the RSM", January 2006; or to EPA, "AirControlNET version 4.1, Control Measure Documentation Report," August 2005. However, we have reviewed both of these documents and find no list of innovative and emerging controls in either.

On page 3-20, EPA says "... the analysis of the costs of meeting the current standards and
more stringent alternatives rely on innovative and emerging controls with derived costs.
Many controls employed to meet the more stringent standards include some of these
unknown measures with assumed costs. The feasibility of these assumed controls is
discussed in Appendix F." We can find no such Appendix F to the interim RIA.

In sum, we see no justification for assuming a large contribution from "innovative and emerging" controls by 2015, and no justification for assuming that they will cost as little as the median among the costs of all currently available control technologies. Rather than assuming extensive availability of unidentified cheap new controls, EPA should endeavor for the final RIA to expand the list of known, documented, and validated controls that is included as options within AirControlNET. EPA has provided in the interim RIA some indication of the areas in which AirControlNET is known to be substantially incomplete in reflecting the set of currently available control measures (e.g., mobile sources generally, SOx area sources, and NH3 sources). EPA should aim in the final RIA to develop a more complete list of available controls for these and the other "control factors." The analytical goal for which EPA should strive is to be able to simulate in a realistic manner the particular set of controls that a locality would plausibly adopt and the resulting costs if the community really was required to reduce emissions from various source categories to the degree estimated as necessary for that community in Appendix A. Assumed "innovative and emerging" controls, particularly when they are assumed to be widely available at low cost, should have no role in such a simulation.

C. EPA Should Address Both the Counties with Non-Attaining Monitors and the Counties in Nonattainment Areas.

In the recent final designation of PM_{2.5} nonattainment areas, EPA designated both the counties with non-attaining monitors and any surrounding areas thought to contribute to the exceedances of the NAAQS. While EPA estimates there are 116 counties with monitors exceeding the PM_{2.5} NAAQS (based on 2002-2004 data; see Table 2-2 of the interim RIA), there were some 225 counties or partial counties included in EPA's final PM_{2.5} nonattainment designations. In essence, the area across which local nonattainment-related controls (emission reductions plus nonattainment NSR and transportation conformity) will be required is about twice as large as the area within which the NAAQS will be exceeded.

EPA does not appear to reflect this distinction in the interim RIA. In the portion of the analysis projecting the nationwide impact of alternative standards and recently adopted but not-yet-implemented programs (e.g., Table 2-2), EPA develops estimates that count only the counties with non-attaining monitors. We believe this approach focusing only on counties with non-attaining monitors under-represents what is at stake in considering alternative NAAQS. Table 2-2 in the interim RIA indicates that replacing the current NAAQS with the proposed standard would increase the number of counties now with non-attaining monitors from 116 to 191. We believe that a more-accurate representation of the impact of adopting the proposed standard

would be to show an increase in the number of counties in PM_{2.5} nonattainment areas from 225 to roughly 370 (assuming continuation of the roughly 2:1 ratio between counties with nonattaining monitors and counties in the surrounding nonattainment areas). The number of additional counties that would be brought into the nonattainment program by a change from the current to the proposed NAAQS would be approximately 145, not 75 – roughly twice what EPA currently shows in the interim RIA.⁷

It is not clear how this distinction between counties with non-attaining monitors and counties in nonattainment areas would affect EPA's benefit-cost analysis in the interim RIA for the five urban areas. We cannot find in the materials describing this analysis any indication for each city of how the area across which "urban-area" controls are applied compares with the area of the counties with non-attaining monitors and with the area that would be designated as in nonattainment. It would be best in this analysis if EPA were to simulate uniform application of urban-area controls across the entire portion of each urban area that would likely be designated as in nonattainment. This approach would generally replicate the manner in which communities most commonly seem to implement nonattainment-related control measures – a control requirement is typically applied uniformly to all sources of a certain sort within the confines of the designated nonattainment area, instead of being tailored or targeted in some manner at only those sources within some selected portion of the nonattainment area.

If EPA in the RIA does not simulate application of urban-area controls across a geographic area defined as we suggest - to an area generally matching the boundaries of the likely designated nonattainment area - then we expect that EPA's analysis will project an erroneous relationship between benefits and costs. We believe, other things being equal, that fine particle controls on sources located upwind and near a population concentration will generally yield a higher ratio of monetized benefits to costs than will controls on sources downwind and/or farther from the population concentration. Targeting control requirements at sources upwind/near a population concentration can yield efficiencies. To the extent that EPA's analysis spreads the simulated controls across an area broader than the designated nonattainment area so as to include less-populated and/or downwind areas, the Agency will tend to project a benefit-to-cost ratio that is lower than the community might actually obtain in practice with its control program. The opposite is also likely true - if EPA concentrates the simulated controls within an area that is smaller than the designated nonattainment area, the Agency will tend to project a benefit-to-cost ratio that is unrealistically high. Note that there could be several reasons why EPA might not match the area over which urban-area controls are simulated to the boundaries of the nonattainment area: perhaps the Agency has not recognized this issue, perhaps (quite likely) the grid squares for which the CMAQ model estimates ambient concentrations cannot be matched closely to county boundaries for nonattainment areas, perhaps for other reasons.

In any case, EPA should recognize that nonattainment designation will typically result in controls being required across the entire designated nonattainment area, and not only within counties with non-attaining monitors. Recognition of this fact would clearly suggest changes in the RIA – in how EPA portrays the impact of alternative standards on the number of counties in nonattainment, and perhaps also in how EPA models costs and benefits in sample urban areas

⁷ These figures are based on EPA's analysis reported in the interim RIA. A different analysis by A.S.L. & Associates of the impact of the proposed standards based on 2004-2005 air quality data finds that more than 225 additional counties would be put into nonattainment by the tighter 24-hour standard (www.asl-associates.com).

and for the nation as a whole.

D. EPA Should Reflect in the RIA the Costs of NSR and Transportation Conformity.

The cost to a community of being in nonattainment with a NAAQS includes not only the cost of the controls that must be implemented to attain the standard, but also the economic losses from being subject to nonattainment new source review (NSR) and transportation conformity requirements while in nonattainment. EPA's New Source Review: Report to the President (June 2002) concluded that NSR requirements applied to existing power plants, refineries and other industrial facilities impede or result in the cancellation of a variety of projects that would provide needed capacity or efficiency improvements. The impediments to growth, investment and modernization from application of nonattainment NSR have been among the primary concerns cited by state and local officials contesting EPA's recent designation of broad PM2.5 nonattainment areas, including counties with non-attaining monitors and the additional areas with sources thought to be contributing to nonattainment.⁸ EPA should somehow estimate the losses due to NSR and transportation conformity that come with nonattainment designation, and the Agency should include these losses in the benefit-cost analysis.

E. EPA's Sensitivity Analysis for Different Possible Mortality Thresholds is Inadequate for Several Reasons

We question EPA's assumption of a "hockey stick" functional form as the single approach for modeling a non-linear concentration-response relationship, and the Agency's failure to re-estimate whatever non-linear or threshold-based relationship is assumed against the original epidemiological data.

EPA describes on page A-60 of the interim RIA the Agency's approach in this sensitivity analysis:

In addition to the tables of primary estimates, we also provide analyses of the sensitivity of mortality impacts to alternative assumptions about possible thresholds in the mortality concentration-response function, for both incidence and monetized value. These sensitivity analyses can be difficult to interpret, because when a threshold above the lowest observed level of PM_{2.5} in the underlying epidemiology study (Pope, et al 2002) is assumed, the slope of the concentration-response function above that level must be adjusted upwards to account for the assumed threshold (see NAS, 2002, EPA, 2005 for discussions of this issue). Depending on the amount of slope adjustment and the proportion of the population exposed above the assumed threshold, the estimated mortality impact can either be lower (if most of the exposures occur below the threshold) or higher (if most of the exposures occur above the threshold).

Under EPA's approach -- assuming a hockey-stick functional form and then simply

⁸ See, for example, the series of letters from the Governor and other Indiana officials regarding PM_{2.5} nonattainment designations at www.in.gov/idem/air/pm25standard.

A concentration-response function has a "hockey stick" form if there is zero response to increasing concentrations up to some threshold concentration, and then beyond this point the response increases linearly with increasing concentration. A graph of such a function is said to look like a hockey stick – the zero-response portion of the function represents the blade of the hockey stick lying flat and parallel to the x-axis of the graph, and the linearly increasing portion of the function represents the handle of the hockey stick extending upward and to the right from the threshold point.

adjusting upward the slope that was originally estimated assuming a linear functional form -- the steeper slope mitigates some or all of the impact of assuming a higher cutpoint. In some instances, this approach even results in EPA estimating benefits that are greater for a higher cutpoint than they are for a lower cutpoint. A detailed discussion of the problems inherent in EPA's approach is provided in comments on this subject by Dr. Paul Switzer of Stanford University (Attachment B in Docket # EPA-HQ-OAR-2001-0017-1554.1).

We further believe that this sensitivity analysis in the interim RIA is unreliable because of the limited spatial resolution afforded by CMAQ in modeling the variation in fine particle concentrations within an urban area.

In the interim RIA, EPA provides results for three urban areas of local-scale modeling of primary PM2.5. Whereas the regional-scale modeling performed for most of the RIA using the CMAQ model projects a single PM2.5 concentration as applying across an entire 36x36 kilometer grid square, the much finer local-scale modeling reveals large gradients in primary PM2.5 concentrations within such a single grid square. Within one grid square in Birmingham, AL, for example, the local-scale AERMOD model shows annual average primary PM2.5 concentrations ranging from near zero throughout most of the grid square to roughly 15 ug/m3 downwind of a particularly large source (see Figure 5 in Appendix B). The CMAQ model projects that the entire population living within this large grid square will be exposed to a single annual average baseline concentration in 2015 that exceeds the current NAAQS. Finer local-scale modeling, on the other hand, would show substantial spatial variation in concentrations within this grid square, perhaps with much of the population exposed to baseline concentrations in 2015 that are below, not above, the current NAAQS. 10

The regional-scale CMAO modeling that EPA used most extensively for the interim RIA is unable to show concentration gradients at a scale of less than 36 km x 36 km. A grid square of this size is slightly smaller than the size of the average U.S. county. The inability of CMAQ to project concentration gradients at less than a county scale means essentially that an entire county's worth of population is simulated as subject to a single ambient concentration. This causes EPA's analysis of the impact of different assumed thresholds in the concentrationresponse function for mortality to become highly unreliable. As the assumed threshold is moved either up or down, this large increment of population shifts as a block to either below or above the assumed threshold. The sensitivity analysis of benefits as a function of different assumed thresholds tends to become an unrefined step function - one will see very large changes in benefits as the assumed threshold passes the single concentration value at which this block of population is projected to be exposed. The reality, as would be projected using a finer scale model, is that the individuals residing within a county-sized grid square are actually exposed to differing concentrations of PM2.5. Some will be exposed above and some will be exposed below most of the potential thresholds that are being analyzed. A mortality benefits sensitivity analysis for alternative thresholds that used a finer local-scale model would show a much more reliable, continuous, relationship than the step-function relationship that is obtained using CMAQ.

 $^{^{10}}$ The AERMOD results shown in Figure 5 of Appendix B portray average annual concentrations of primary PM_{2.5} across two of the Birmingham CMAQ grid squares. The modeled primary PM_{2.5} concentrations appear to vary within this area from less than 2 ug/m3 (for most of the city) to more than 15 ug/m3 (for small portions of the city). If some estimate of secondary PM_{2.5} were added to what is shown in Figure 5, we guess that the resulting total concentration of PM_{2.5} for much of the city would be less than the current annual standard of 15 ug/m3.

June 30, 2006

Senator George Voinovich 524 Hart Office Building Washington, DC 20510

Dear Senator Voinovich:

I am writing to express my concern about the Environmental Protection Administration's proposed reductions in the 1997 National Ambient Air Quality Standard (NAAQS) particulate matter (PM2.5) standard. The Administrator has indicated that the finalized rule will be released in September 2006. Several local governments in my state that have achieved compliance with the 1997 standard will fall out of compliance if the standard is reduced.

Since the 1997 standard imposed under the Clean Air Act, there have been several new rulemakings that are just beginning to take effect with the full benefits to be realized by 2020. The EPA has indicated that national concentrations of PM 2.5 have decreased by 10 percent since 1999. The new rules; Tier 2 Mobile Source Rule, Highway Diesel Rule, Off Road Diesel Rule, Clean Air Interstate Rule, Clean Air Visibility Rule, and the Clean Air Mercury Rule are all designed to significantly reduce NOx and SO2 emissions from mobile and stationary sources. The EPA has projected that PM2.5 will also be significantly reduced over the next two decades as a result of these new rulemakings.

My state has made substantial investments over the past 20 years to improve air quality and will continue to do so, but the additional cost to attain a lower standard prior to evaluating the impact of the new regulations puts our local economy at risk in terms of jobs, revenue, and economic growth. The EPA projects that even with these recently promulgated federal measures, a number of already well-controlled metropolitan areas will not attain the existing PM_{2.5} and/ or 8-hour ozone NAAQS within the 2010-2015 timeframe prescribed by EPA, and could face highway sanctions or draconian control measures.

More importantly, the existing 1997 standard was deemed protective of human health and the environment and EPA's current estimate of health effects from exposure to PM2.5 has decreased since 1997. Since 1997 the scientific uncertainties regarding PM health effects have increased, calling into question the impact of socioeconomic factors on public health in urban areas. As an elected official, I want to explore these implications as I work to allocate resources to the areas where it will be of most benefit to the citizens of my state.

I urge you to streamline the regulatory requirements under the Clean Air Act by allowing the most recently enacted air quality rules authorized by the U.S. Congress to take effect prior to any new reductions in the NAAQS PM standard. Furthermore, I am writing to request you to require the EPA to provide a rigorous cost benefit analysis of the implementation of the current PM standard by individual states and/ or local governments in conjunction with the air quality rules listed above prior to the reduction of the 1997 PM standard. Finally, I want to notify you of my support to maintain current NAAQS for PM2.5 until the full benefits of the recently enacted air quality rules are in effect.

Sincerely,

Lynn Wachtmann State Senator 1st District DAVE FREUDENTHAL GOVERNOR



STATE CAPITOL

Office of the Governor

July 7, 2006

The Honorable Stephen Johnson Administrator US Environmental Protection Agency 1200 Pennsylvania Avenue, NW Washington, DC 20460

Dear Administrator Johnson,

I am writing to you about the Environmental Protection Agency's review of the particulate matter air quality standard. As you are aware, my state is directly impacted by your decision.

As you know, EPA proposed earlier this year to modify the particulate matter standard. I understand that you intend to make a final decision by September 27, 2006. While I strongly support efforts to improve air quality and protect public health, I am concerned that EPA and the states have only begun to implement the existing particulate matter standard.

I am concerned that changing the standard will substantially increase the number of nonattainment counties. A nonattainment designation carries serious consequences that impact economic growth, jobs, mobility, energy prices, consumer choices, and quality of life.

With this in mind, I urge you to proceed with extreme caution as you consider whether to change the particulate matter standard. The final decision should be based on sound science and should appropriately balance scientific uncertainty with the joint benefit of people's health and livelihood. Additionally, this decision should take into consideration the benefits to be achieved by other EPA regional air programs.

Thank you for your consideration in this important matter.

Dave Freudenthal

Governor

TTY: 777-7860

DF:pjb

PHONE: (307) 777-7434

FAX: (307) 632-3909

From: Sent: To: Subject: webservd@www.senate.gov Wednesday, July 12, 2006 4:23 PM EPW, Guest1 (EPW) www_email

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July 12, 2006

The Honorable George V. Voinovich

Chairman

Senate Committee on Environment and Public Works Subcommittee on Clean Air, Climate Change and Nuclear Safety 410 Dirksen Senate Office Building Washington, D.C. 20510

Dear Chairman Voinovich:

I am writing to express concern from members of the Tennessee Chamber of Commerce & Industry regarding EPA's final decision on the setting of the fine particulate matter (PM2.5) National Ambient Air Quality Standard and to urge you to retain the current 15 ug/m3 annual standard. We understand that the agency is considering lowering the annual standard tol4 ug/m3.

The Chamber supports programs to ensure that air quality meets EPA standards. At the same time, we are concerned that states and local governments have not had a chance to fully implement and assess the success of steps that are underway to comply with the PM2.5 designations just set last April.

EPA and other government agencies and committees admit that we do not know enough to target controls on the right emission sources or types of particles, indicating that there is a high degree of scientific uncertainty relating to the EPA proposal. In contrast, the enormous economic consequences of much tighter standards are indisputable.

Rather than changing the standard at this time, the Tennessee Chamber would encourage EPA to work closely with state and local governments to ensure that all areas come into compliance with the existing PMZ.5 standard. EPA has yet to even define the planning process to attain the existing standard. States and communities are now placing controls and trying to plan for attaining the current 15 ug/m3 standard. Changing the standard now will present a new layer of needless complexity to the task local and state officials have in developing these plans to attain and maintain air quality standards in our region which will be beneficial to the many citizens while maintaining public support of these actions. The existing acts dealing with Clean Air need to be given a chance to operate and demonstrate success in improving air quality.

The Chamber hopes the Committee will seriously consider and properly communicate Tennessee industries' concern with a more stringent standard at this time.

Sincerely,

Wayne K. Scharber Vice President for Environmental Affairs Tennessee Chamber of Commerce & Industry</MSG> $\mbox{\ensuremath{\mathsf{MSG}}}\mbox{\ensuremath{\mathsf{NSG}}}\mbox{\ensuremath{\mathsf{MSG}}}\mbox{\ensuremath{\mathsf{NSG}}}\mbox{\ensuremath{\mathsf{Chamber}}}\mbox{\ensuremath{\mathsf{Chamber}}\mbox{$

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